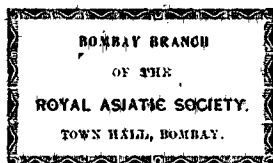


Irrigation Revenue Report,
1890-91 to 1892-93.



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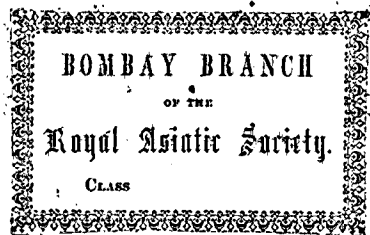
ANNUAL IRRIGATION REVENUE REPORT,

SIND, 133826

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ANNUAL IRRIGATION REVENUE REPORT,

SIND,

1890-91.

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ANNUAL REVENUE REPORT

OF THE

IRRIGATION DEPARTMENT IN SIND FOR 1890-91.

The curve of the inundation of 1890 follows pretty closely that of the average of the preceding ten years. The inundation was fair, and in some respects above the average, but it cannot be called good. Compared with that of 1889 the rise was late and the height attained in June and July low; the fall commenced earlier and continued quicker; so far the comparison is unfavourable, but the maximum height being reached late in August, and not early in the season, tells greatly in favour of the inundation under review. The rainfall was above the average and beneficial, enabling much land to be ploughed and got ready for sowing which without it could not have been prepared.

2. The Rohri District was again swept by floods, but the depth of water over the country was not so great, nor did the spill last as long as in the previous year. The flood from Bahawalpur did not reach Rohri till late in the season, and had only time to join the local floods before the water began to subside. Owing to the short duration of these overflows their effect on the Eastern Nára was much less than in the previous year, the damage done by them was also less, and the return, in the shape of rabi cultivation, greater. In the Ghár District a sluice was carried away in the Jhali Bund, which resulted in the formation of a large breach through which a flood poured down the usual course through the Naushahro, Rato-dero and Kambar talukas.

The damage done by this water was not much, and it was fully compensated for by the rabi cultivation and the assistance the flood water gave to some of the canals crossed by it.

In the Sháhbandar District there were several breaches in the river embankments owing to the great height reached by the river in this part late in the season; some of these were closed, but others caused the flooding of considerable areas of cultivation. The continued increase in the ratio of the rise of the river in the lower reaches, compared with that of Upper Sind, is worthy of remark. In 1889 the highest reading on Bukkur gauge was 16 feet 6 inches, and the corresponding height on Kotri gauge 19 feet 9 inches; whereas in 1890 for a reading of 16 feet at Bukkur we have 20 feet 7 inches recorded at Kotri.

3. With the exceptions noted in the previous paragraph, all the river embankments remained staunch. Early in the inundation the new loop behind the northern portion of the Kashmor Bund was completed almost at the same time that the river receding removed all danger; it had, however, approached to within 172 feet of the main bund.

4. With the exception of the Begári and Unharwáhs in the Upper Sind Frontier District, all the main canals worked exceptionally well, considering the low level reached by the river during the early part of the inundation. The unsatisfactory working of the Begári and Unharwáhs was due to the erosion at the mouth of the dhand from which they are fed. Apparently this has now settled itself, but both canals have been working much over their normal power, and works will be necessary to secure a certain fixed supply independent of variations in the height of supplying channel caused by changes in the set or position of the river. The Pritchard Canal, designed as a feeder to the lower portion of the Western Nára, was opened during the inundation for the first time; unfortunately just before the Canal was ready, the river took its course down the dhand from which it was to be fed, and eating away a large area of sandy soil to the north swept it past and into the canal, thus making it of little

use. This action is still in progress, but eventually the canal will right itself and answer all anticipations. All inundation canals in Sind are subject to these unfortunate contretemps, and the lesson to be learnt from them seems to be that decentralization, so to speak, of canals, designed to afford help to each other when in difficulties, is the proper course to pursue in improving irrigation in Sind.

5. The clearance grant was distributed as usual and expended in removing silt deposit from all canals where most required, and that it was well laid out is shown from the fact that the canals, with little help from floods, well maintained the average area of cultivation in an inundation late in coming, and for the most part below the average in height.

6. During the year under report a new Canal District was formed in order to place the whole of the Western Nára in one charge, so as not to leave this important canal in charge of two independent officers.

The Western Nára District therefore now appears in this report for the first time, and the figures now given in the various tables for the Ghár and Karáchi Canals Districts, out of which it was formed, cannot be compared with those shown against these districts in previous reports.

7. The following statement gives the agricultural results of the inundation and the net consolidated assessment of the year, comparing them with those of the five preceding years :—

STATEMENT A (FOR DETAILS *see* TABLE VII).

Year.	ASSESSED AREA OF CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
1	2	3	4	5
	Acres.	Acres.	Acres.	Rs.
1885-86	1,288,855	243,867	1,532,722	34,33,190
1886-87	1,407,778	185,888	1,593,666	35,89,499
1887-88	1,438,216	215,411	1,653,627	37,20,291
1888-89	1,648,586	238,970	1,887,556	42,25,697
1889-90	1,722,040	387,764	2,109,804	45,83,932
Average	1,501,095	254,380	1,755,475	39,10,522
1890-91	1,596,939	358,218	1,955,157	45,27,815
Increase or Decrease ...	+95,844	+103,838	+199,682	+6,17,293

The area of cultivation, though falling short of that of the previous year, is considerably in excess of the average or of that of any of the preceding years. There is a decrease of 125,101 acres of kharif compared with 1889-90, due to the difference of the inundations and the partial failure of the Begári and Unharwáhs. The rabi area also shows a falling off of 29,546 acres, but it is largely in excess of that of any previous year, and its extent is the more satisfactory in that it is due in a far greater degree to canal water than in 1889; a high river late in August is especially favourable to this crop. Notwithstanding the considerable decrease in the area of cultivation the irrigation share of net consolidated assessment shows only the small difference of Rs. 56,117 for the satisfactory reason that the remissions of the year amounted only to Rs. 67,845 against Rs. 2,33,442 of 1889; some changes in the settlement of the Tando Alahyár Táluka of the Hyderabad Canals District also helped to increase the assessment.

8. Statement B. following gives the totals of A. for 1889-90 and 1890-91 distributed by canal districts, and contrasts the results in each district :—

STATEMENT B. (*vide* TABLE VII-A).

District.	1890-91.			1890-91.			RESULTS.		
	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.		Kharif.	Rabi.		Kharif.	Rabi.	
1	2	3	4	5	6	7	8	9	10
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
Begári Canals ...	248,357	15,156	4,93,247	199,419	25,736	4,26,013	-48,938	+10,580	-67,294
Shikárpur Canals ...	115,083	21,260	3,56,162	93,425	27,918	3,38,998	-21,658	+6,656	-17,169
Ghár Canals ...	240,927	74,915	8,53,862	235,107	80,243	9,12,045	-4,820	+5,328	+59,153
Western Nára ...	*183,964	63,774	6,29,897	154,310	62,747	6,01,760	-29,654	-1,027	-26,128
Eastern Nára ...	172,267	100,366	4,84,688	165,200	68,172	4,34,255	-17,067	-41,194	-50,433
Hyderabad Canals ...	387,758	27,467	7,59,285	329,236	30,016	7,56,135	-8,522	+2,540	+26,850
Fuleli Canals ...	249,126	49,790	6,16,540	232,773	43,310	6,35,705	+1,647	-6,480	+19,165
Karáchi Canals ...	174,538	26,036	4,21,251	174,469	20,078	4,22,900	-69	-5,958	+1,649
Total ...	1,722,040	387,764	45,83,932	1,596,939	358,218	45,27,615	-1,25,101	-29,546	-56,117

* Written back from Ghár and Karáchi Canals District.

This statement shows a decrease of 125,101 acres of kharif and of 29,546 acres of rabi compared with the area of cultivation of the previous year. The decrease in kharif is general, with the exception of a slight increase in the Fuleli District due to the command of the water given by the new regulator, and due to the unfavourable character of the inundation as compared with that of 1889. In the Begári and Shikárpur Districts where it is more marked, the special causes before alluded to are respectively the failure of the Begári and Unharwáhs in the Begári District and the floods in Rohri which forms part of the Shikárpur Canal District. The decrease in rabi is almost all in the Eastern Nára District in which this crop was exceptionally large in the previous year owing to more extensive flood, and the increase apparent in four districts is accounted for by the favourable time at which the river reached its maximum height.

9. In the following statement is exhibited, for each district, the irrigation share of the net consolidated assessment on Government land for the six years ending 1890-91, the figures for which are contrasted with the average of the five preceding years and the result shown :—

STATEMENT C (*vide* TABLE VII).

Year.	Begári Canals.	Shikárpur Canals.	Ghár Canals.	Eastern Nára.	Western Nára.	Hyderabad Canals.	Fuleli Canals.	Karáchi Canals.	Total.
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86 ...	4,10,224	2,31,037	5,15,854	2,17,190	5,82,024	5,93,903	9,92,485	3,38,743	34,33,160
1886-87 ...	3,68,832	3,08,363	6,41,785	2,56,550	5,95,926	6,00,032	4,74,182	3,42,709	35,49,499
1887-88 ...	3,80,624	3,22,473	6,24,727	3,15,302	5,73,127	6,18,847	6,29,157	3,60,534	37,30,291
1888-89 ...	4,20,162	3,55,136	7,53,968	3,89,214	6,83,959	6,64,719	5,46,719	3,81,069	42,25,997
1889-90 ...	4,97,247	3,56,162	8,92,305	4,84,688	9,59,577	7,29,288	6,16,540	4,21,251	45,83,932
Average ...	4,34,835	3,24,634	7,64,011	3,32,659	6,92,993	6,40,239	5,11,917	3,63,301	39,10,322
1890-91 ...	4,26,013	3,25,920	9,12,045	4,84,255	6,01,760	7,56,135	6,35,705	4,22,900	45,27,615
Increase or Decrease...	-8,825	+14,359	+2,08,034	+1,01,596	+8,776	+1,15,896	+1,23,888	+23,599	+6,17,293

All districts with the exception of the Begári show large increases over the averages, but compared with the figures of the previous year only the Ghár, Hyderabad, Fuleli, and Karáchi Canals districts come out favourably.

10. The following statement shows the area of cultivation and the assessment of jágírh lands, the unrealized balance at the end of last year, the actual realizations and the outstanding balances at the close of the year under report separately for Khelát and Sind :—

STATEMENT D (*vide* TABLE VII A).

Districts.	AREA CULTIVATED DURING YEAR.			Unrealized balance at end of last year.	ASSESSMENT OF THE YEAR.		Total for collection.	Remissions.	Net total realizable.	Actual realization during year.	Balance outstanding at end of year.
	Kharif.	Rabi.	Total.		Area.	Amount.					
1	2	3	4	5	6	7	8	9	10	11	12
	Acres.	Acres.	Acres.	Rs.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Khelât Lands (Foreign)—											
1890-91	61,986	1,778	63,764	12,758	63,744	63,747	76,505	...	76,505	*52,770	23,735
1899-90	67,254	12,691	79,945	25,729	79,945	79,983	1,06,712	-1,511	1,06,201	92,443	12,758
	-5,288	-10,913	-16,201	-13,971	-16,201	-16,238	-30,207	-1,511	-28,696	-39,673	+10,977
Jâghir Lands in Sind—											
Upper Sind Frontier	1,312	248	1,560	5	1,560	687	692	...	692	684	8
Shikarpur	23,792	27,556	51,348	7,425	51,348	18,242	25,667	...	25,667	30,421	5,246
Thar and Parkar	1,722	39	1,761	1,297	1,761	801	2,108	...	2,108	2,093	15
Hyderabad	100,321	5,384	105,705	5,519	105,708	41,248	44,767	...	44,767	37,432	7,285
Karachi	14,225	6,970	21,195	2,213	21,195	8,219	10,432	...	10,432	7,539	2,893
1890-91	141,575	43,197	184,572	14,389	184,572	69,297	83,668	...	83,668	*65,219	15,447
1899-90	147,387	12,732	160,070	11,658	160,070	62,836	74,494	79	74,415	60,153	14,262
Increase or Decrease.	-5,982	+30,464	+24,502	+2,711	+24,502	+6,461	+9,172	+79	+9,251	+8,066	+1,185

Rs.
*Total of both items 1,20,959
Difference on account of annas 2

Vide Table III-A 1,20,901
Realized by Public Works Department, 399
Vide Table III 1,21,300

From Khelât the returns are unsatisfactory, showing a decrease of cultivation of 16,201 acres. This is chiefly due to the deficient supply in the tails of the Nurwâh and Sirwâh branches of the Begâri from causes already explained. Although the outstanding balance at the end of the year was Rs. 23,735, or Rs. 10,927 in excess of that of the previous year, Rs. 12,313 have since been collected and Rs. 10,035 have been recommended for remissions on account of failure of supply, and the Political Agent reports that the remaining Rs. 1,387 would be recovered before the 30th July. For the jâghir lands in British territory, the returns are more favorable, showing an increase of 24,562 acres, due to the large rabi crops from the ample and seasonable rainfall and the late rise of the river. The low inundation is also accountable for the slight decrease in kharif. The increase apparent in outstandings is attributed partly to the increase in the demand and partly to the fact that the collection establishment were for some time engaged in census work.

The figures in the above statement are obtained from a new Table, III-A which has been added to this report in response to the wish expressed by Government in paragraph 17 of Government Resolution No. 86 W. I.—970 of 1891 reviewing last year's report.

11. The following statement is given to show the loss to canals, represented by the difference paid for cultivation in jâghir and Government lands :—

STATEMENT D (1).

Class of Works.	Hakâbs at present Assessment.	Loss.	Jâghir Revenue at full rates.	Water share of Government Land Assessment.	Total, what it should be for the Province.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Major Works	68,272	75,446	1,43,718	8,51,981	9,95,699
Minor Works, Capital	34,534	2,22,961	2,57,495	16,74,823	19,32,318
Do. Revenue	30,238	1,90,943	2,21,181	*20,01,011	22,22,192
Total	1,33,044	4,89,350	6,22,394	45,27,815	51,50,209

* Includes works for which neither Capital nor Revenue Accounts are kept.

These figures show that the canals would have earned Rs. 4,89,350 more, had all the land cultivated from them been subject to the usual assessment, and that the amount is steadily increasing.

12. The following statement exhibits the assessment on account of Government and jágghir lands in British and foreign territory irrigated during the year, and also that for five preceding years:—

STATEMENT D (2) (*vide* STATEMENT D AND TABLE III-A).

Years.					ASSESSMENT.		
					Government Land.	Jágghir Lands, including Khelát Lands.	Total.
1					2	3	4
					Rs.	Rs.	Rs.
1885-86	...	...	...	...	34,33,190	1,13,802	35,46,992
1886-87	...	...	...	...	35,89,499	1,23,598	37,13,097
1887-88	...	...	...	...	37,20,291	1,18,295	38,38,586
1888-89	...	...	...	...	42,25,697	1,37,455	43,63,152
1889-90	...	...	...	...	45,83,932	1,42,819	47,26,751
Average					39,10,522	1,27,194	40,37,716
1890-91	...	...	...	...	45,27,815	1,33,044	46,60,859
Results					+ 6,17,293	+ 5,850	+ 6,23,143

The results under both heads are satisfactory, showing an increase over the average and over any of the former years, excepting 1889-90, which was a year with an exceptionally good inundation.

13. In Statement E. below are given the totals for collection and actual realizations for the year for the five revenue districts:—

STATEMENT E (DETAIL OBTAINED FROM CANAL RETURNS VIII AND VIII-A).

District.	Unrealized Balance at end of year.	Deduct Remissions on account of former years.	Net amount realizable on account of outstanding as beginning of year.	Net consolidated Assessment during year as per Canal Return VIII.	Total for collection.	Actual Receipts during year.	Balance outstanding at end of year.	Irrigation share of collection.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Upper Sind Frontier	35,608	758	34,850	5,17,803	5,52,653	5,17,900	34,753	4,66,109
Shikárpur	18,446	6,815	11,631	18,25,047	18,36,678	18,12,966	23,712	16,31,670
Thar and Párkar	2,349	..	2,349	4,47,187	4,49,536	4,48,820	716	4,03,937
Hyderabad	11	..	11	15,64,984	15,64,995	15,64,190	805	14,07,798
Karáchi	16,506	678	14,828	6,75,890	6,90,718	6,65,237	25,481	5,96,700
	71,920	8,251	63,669	50,30,911	50,94,580	50,09,113	85,467	45,08,201
1889-90	47,247	5,951	41,296	50,93,251	51,34,547	50,62,420	72,127	45,56,187
	+24,673	+2,300	+22,373	-62,340	-39,967	-53,307	+13,340	-47,986

* These balances differ from those given in last year's report, but they have been communicated by Revenue Department as correct.

The total for collection shows a decrease of Rs. 39,967 below that of the previous year, principally in Thar and Párkar, as previously explained. There is also an increase apparent in the outstanding balances, most probably due to the Census operations in Shikárpur and Karáchi.

14. The following statement shows the realizations on account of hakába from jágghir land in Sind and from land irrigated in Khelát for each district and for the division for the six years ending 1890-91:—

STATEMENT E (1) (*vide* TABLE III).

Years.	Begri Canals.	Shikarpur Canals.	Ghār Canals.	Western Nāra.	Eastern Nāra.	Hyderabad Canals.	Pulēli Canals.	Karachi Canals.	Total.
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	52,205	6,291	3,659	4,866	361	9,919	16,069	2,567	96,037
1886-87	62,104	4,134	2,794	4,703	1,796	20,311	21,383	2,804	1,40,029
1887-88	61,778	2,986	1,304	2,530	819	14,479	19,252	2,675	1,12,503
1888-89	1,20,022	3,610	2,945	5,213	996	24,029	31,351	3,473	1,94,135
1889-90	95,423	2,263	2,450	5,730	1,630	17,640	23,664	3,620	1,52,040
Average	82,426	3,574	2,630	6,147	1,038	17,456	22,479	3,029	1,39,070
1890-91	85,814	5,406	2,463	6,070	3,276	14,063	29,430	3,248	1,51,590
Increase or Decrease...	-26,612	+1,532	+4,563	+2,523	+2,233	-3,393	+900	+319	-17,680

The result for the year, compared with the averages of five preceding years, shows a decrease of Rs. 17,680, principally due to falling off in the amount for collection from Khelāt.

15. Statement E (2) following shows the miscellaneous canal revenue actually collected in each district for the year 1890-91 and five preceding years :—

STATEMENT E (2) (*vide* TABLE III).

Year.	Begri Canals.	Shikarpur Canals.	Ghār Canals.	Eastern Nāra.	Western Nāra.	Hyderabad Canals.	Pulēli Canals.	Karachi Canals.	Total.
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	859	1,601	5,095	18,362	11,757	3,058	3,692	3,690	48,114
1886-87	883	1,960	4,189	16,526	10,128	3,579	6,131	4,761	48,457
1887-88	947	2,073	4,343	15,173	10,944	3,307	4,883	3,440	45,290
1888-89	957	2,164	4,600	15,824	12,795	3,957	4,809	4,468	49,604
1889-90	821	4,035	7,201	15,708	12,070	3,993	4,299	7,040	55,167
Average	893	2,366	5,125	16,318	11,539	3,645	4,763	4,880	49,329
1890-91	1,045	2,209	7,003	18,785	11,542	3,976	4,165	6,380	55,105
Increase or Decrease ...	+152	-157	+1,878	+2,467	+3	+331	-598	+1,730	+5,776

The net result for the province is an increase of Rs. 5,776 over the average, or a decrease of only Rs. 62 from the sum collected in the previous year.

16. The actual realizations of the year under the three heads "Government Land", "Jāghir" and "Miscellaneous," have been given separately in Statements E, E(1) and E(2), in the following one they are shown collectively, together with the receipts on account of sale of occupancy rights :—

STATEMENT E (3) (*vide* TABLE VI-A).

Years.	Government. Irrigation share of net consolidated Assessment collected.	Jāghir Land in Sind and Foreign Lands in Khelāt. Hakāba.	Miscellaneous.	4 per cent. of Irrigation share of Proceeds of Sales of Occupancy-rights.	Total actual Receipts.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	34,87,863	96,037	48,114	.....	36,32,014
1886-87	36,09,629	1,40,028	48,457	.....	37,98,114
1887-88	37,46,333	1,12,503	45,290	.....	39,04,126
1888-89	42,15,214	1,94,135	49,604	.....	44,58,953
1889-90	45,56,187	1,52,646	55,167	11,072	47,75,072
Average	39,23,045	1,39,070	49,329	2,214	41,18,658
1890-91	45,08,201	1,21,390	55,105	*15,066	46,99,762
Increase or Decrease.	+5,85,156	-17,680	+5,776	+12,852	+5,86,104

*As arrived at by the Examiner, Public Works Accounts.

The total of the actual receipts is Rs. 75,310 less than that of the previous year, but it is Rs. 5,86,104 in excess of the average shown in the statement.

The receipts from sale of occupancy rights have increased by Rs. 3,994, being four per cent. on the proceeds. During the year under review, however, 35,207 acres were sold, and the credit to the canals on this area is Rs. 3,979 (*vide* Table VII-B).

17. The remissions of the seven years ending 1890-91 are given in the following statement for each canal district :—

STATEMENT F (*vide* TABLE VII).

Districts.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Average.	1890-91.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canals ...	3,376	10,708	20,335	13,032	16,116	26,930	15,083	7,704
Shikárpur Canals ...	369	123	668	101	174	45	247	916
Ghár Canals ...	17,629	1,05,081	92,277	21,387	3,364	61,745	50,280	1,994
Western Nára ...	16,127	17,127	4,903	4,173	18,941	43,138	17,401	563
Eastern Nára... ..	267	4,413	43	177	874	4,996	1,795	2,224
Hyderabad Canals ...	60,391	2,757	3,418	3,031	3,809	8,317	13,704	10,349
Faleli Canals... ..	3,246	1,413	767	3,203	976	30,918	67,443	2,664
Karáchi Canals ...	10,643	14,794	14,068	16,833	18,591	56,853	21,960	41,431
Total ...	1,12,048	1,56,416	1,36,419	61,937	63,045	2,33,442	1,27,217	67,845

The total of the remissions for the year is Rs. 59,372 less than the averages of the six preceding years. Of the Rs. 67,845 remitted, only Rs. 3,590 were on account of deficient water-supply, and two-thirds of this sum were lost in the Begári District. In the Karáchi Canal District Rs. 30,875 were remitted on account of damages from floods and breaches, and Rs. 10,555 are due to the destruction done to crops by rats. In the Hyderabad District Rs. 9,986 are stated to have been remitted on account of alterations in the settlement.

18. In Statement G following is shown the expenditure for maintenance and repairs of canals and bunds, and the charges for revenue collection for the six years ending 1889-90 and their averages compared with their cost in 1890-91 :—

STATEMENT G (*vide* TABLE IV).

Years.	Maintenance and Repairs.			Revenue Collection Charges.	Total.
	Works, including Establishment chargeable to Works.	Establishment proper.	Total.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1884-85	8,53,757	2,13,717	10,67,474	3,36,613	14,04,087
1885-86	8,31,148	2,48,524	10,79,672	3,16,215	13,95,887
1886-87	8,27,922	2,71,930	10,99,852	3,29,394	14,29,246
1887-88	10,41,501	2,61,116	13,02,617	3,42,170	16,44,787
1888-89	9,20,449	2,61,271	11,81,720	3,91,630	15,73,350
1889-90	9,65,517	2,49,041	12,14,558	4,23,904	16,38,462
Average	9,06,716	2,50,933	11,57,649	3,56,654	15,14,303
1890-91	9,77,315	2,44,759	12,22,074	4,22,001	16,44,075
Difference	+ 70,599	—6,174	+ 64,425	+ 65,347	+ 1,29,772

NOTE.—Revenue collection charges are calculated on revenue year.

The expenditure on works is the highest of the series of years, exceeding that of the average by Rs. 70,599, while the cost of establishment shows a decrease of Rs. 6,174. The following abstract shows the expenditure in each district distributed over the different kinds of works on which it was incurred, excluding the cost of establishment charged to works :—

Abstract showing total Expenditure on Repairs executed and in progress on Canals and Bunds during 1890-91.

Name of District.	Silt clearance.		Repairs to Canal Embankments.		Clearance and Improvements to Canal Heads.		Repairs to River Bunde.		Side cutting or sloping and removing curves.		Tadas clearance.
1	2	3	4	5	6	7	8	9	10	11	12
	C. ft.	Cost.	C. ft.	Cost.	C. ft.	Cost.	C. ft.	Cost.	C. ft.	Cost.	Cost.
Begari Canals ...	10,431,501	25,407	410,892	1,778	...	108	12,198,673	60,993	...	...	50
Shikarpur Canals ...	8,044,733	29,335	1,610,877	6,150	...	...	4,237,700	19,750	...	...	2,258
Ghar Canals ...	19,807,657	62,440	4,953,324	16,985	...	...	998,095	3,762	...	...	581
Western Nara Canals ...	14,837,007	46,033	1,613,014	6,696	...	...	1,155,000	4,892	...	...	1,313
Eastern Nara Canals ...	2,400,514	7,731	3,473,065	13,690	...	...	...	...	...	...	...
Hyderabad Canals ...	36,643,823	1,17,173	...	11,008	3,78,338	14,677	...	...	...	...	404
Puleli Canals ...	...	1,24,305	...	18,747	...	...	...	...	...	7,272	1,104
Karachi Canals ...	18,940,088	45,245	...	24,834	...	1,730	5,595,958	36,012	...	1,614	2,439
1890-90 ...	...	4,50,213	...	90,316	...	16,505	...	1,26,900	...	9,088	8,149
Differences ...	...	4,37,273	...	54,874	...	41,677	...	1,46,761	...	16,608	13,131
Differences ...	...	+42,940	...	+44,442	...	-25,172	...	-10,852	...	-7,422	-4,982

Name of District.	Repairs to Regulators, Bridges and sluices.	Erecting Bund at Heads.	Loi Matting.	Repairs to Canal Chaulukies.	Removing old spoil.		Jungle cutting.	Miscellaneous.	Greyones and Stone pitching.	Contingencies.	Total.
1	13	14	15	16	17	18	19	20	21	22	23
	Cost.	Cost.	Cost.	Cost.	C. ft.	Cost.	Cost.	Cost.	Cost.	Cost.	Cost.
Begari Canals ...	4,049	977	...	5,781	...	...	1,316	485	1,274	1,218	1,13,436
Shikarpur Canals ...	1,900	338	...	799	58,360	175	2,139	(1) 5,094	230	160	68,328
Ghar Canals ...	3,322	1,152	...	1,609	...	...	323	(2) 968	4,560	1,105	96,977
Western Nara Canals ...	617	119	1,294	799	2,71,487	407	952	1,179	3	461	63,585
Eastern Nara Canals ...	12,181	...	...	2,173	...	...	2,479	(3) 3,340	...	...	40,924
Hyderabad Canals ...	866	3,050	...	746	...	...	1,908	(4) 1,711	...	...	1,61,431
Puleli Canals ...	844	4,394	...	226	...	...	4,383	(5) 1,985	408	337	1,64,092
Karachi Canals ...	11,436	2,040	...	117	...	...	962	1,604	...	...	1,33,320
1890-90 ...	35,065	12,070	1,294	12,250	...	582	14,422	16,360	6,585	3,281	8,42,073
Differences ...	21,165	10,269	3,209	11,214	...	3,128	11,275	11,420	9,343	1,941	7,92,083
Differences ...	+13,910	+1,901	-1,915	+1,008	...	-1,546	+3,147	+4,946	-2,783	+1,440	+49,990

Note.—Figures for column "Cubic feet" where left blank are not available.

- (1) Includes Rs. 2,012 on account of repairs to Moharis, inspection pathways, mile stones, repairs and construction of Moharis, inspection pathways, pegging and estimating, maintaining gardens, estimating and surveying, fencing.
- (2) " Rs. 445 " "
- (3) " Rs. 421 " "
- (4) " Rs. 712 " "
- (5) " Rs. 2,809 " "
- (6) " Rs. 685 " "
- (7) " Rs. 619 " "
- (8) " Rs. 519 " "
- (9) " Rs. 709 " "

The charge for revenue collection is calculated at 10 per cent. of the amount collected. In Khelat where the actual cost of collection is debited to the canals, it amounts to only 2 per cent. of the revenue collected; in comparison with this charge the sum debited to canals for collecting the revenue from their own Government land appears excessive.

19. In the preceding statement the figures in the column headed "Works" include the cost of supervising and Abkalani Establishment, which is shown separately in the following one for 1890-91 and three preceding years for each District :—

STATEMENT G (a).

		1887-88.					1888-89.				
Districts.	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.	
		Supervis- ing.	Abkaláni.	Total.			Supervis- ing.	Abkaláni.	Total.		
1	2	3	4	5	6	7	8	9	10	11	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Bezri Canals ...	73,958	12,887	88,961	51,848	1,25,806	59,996	12,991	44,716	57,707	1,17,703	
Shikarpur Canals ...	1,01,511	5,066	14,646	19,552	1,21,443	35,725	4,970	14,303	18,973	54,701	
Ghár Canals ...	1,25,880	10,190	32,626	42,816	1,68,696	1,18,172	8,865	27,827	36,192	1,64,964	
Western Nára Canals ...	16,776	4,889	18,866	17,755	34,531	27,826	4,489	14,656	19,065	46,891	
Eastern Nára Canals ...	1,14,566	24,420	...	24,420	1,84,986	1,99,186	20,695	...	20,695	2,19,791	
Hyderabad Canals ...	1,73,405	2,039	17,493	19,472	1,92,977	1,85,013	756	15,891	15,417	2,02,480	
Fuleli Canals ...	2,27,622	...	31,520	31,520	2,59,042	24,102	...	30,467	30,467	1,24,660	
Karachi Canals ...											
Total	8,34,018	58,931	1,48,552	2,07,483	10,41,601	7,21,023	82,496	1,47,180	1,99,426	9,20,449	

		1889-90.					1890-91.				
Districts.	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.	
		Supervis- ing.	Abkaláni.	Total.			Supervis- ing.	Abkaláni.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Bezri Canals ...	87,629	13,084	39,041	49,125	1,36,764	67,595	14,191	22,384	36,525	94,050	
Shikarpur Canals ...	69,717	4,741	10,330	14,671	64,383	60,956	4,777	9,992	14,339	75,735	
Ghár Canals ...	1,02,504	8,002	32,006	40,008	1,42,512	97,107	8,864	18,173	27,037	1,24,144	
Western Nára ...	...	...	...	...	...	64,747	5,946	15,444	19,390	34,137	
Eastern Nára ...	29,437	4,043	15,384	20,407	49,844	29,855	7,065	13,312	21,477	69,832	
Hyderabad Canals ...	1,59,945	21,892	...	21,892	1,81,837	1,65,200	12,570	7,965	20,535	1,88,735	
Fuleli Canals ...	2,00,441	5,397	6,296	11,893	2,12,134	1,80,023	8,561	7,776	16,337	1,96,890	
Karachi Canals ...	1,39,242	5,296	15,610	23,806	1,58,048	1,85,921	6,244	14,217	20,461	1,59,752	
Total	7,83,915	62,655	1,19,547	1,81,602	9,65,617	8,01,214	69,118	1,06,983	1,76,101	9,77,315	

There is a steady and perceptible decrease in the charge for these establishments, which, as might be expected, is more evident in the cost of the "Abkaláni" or the establishment employed in watching the river embankments and canal banks during flood. The increase in the cost of supervising establishment is due principally to more accurate distribution of the charges debited to this head; for the year under report it amounts to 8.6 per cent. of the expenditure on works.

20. The following statement shows the outlay incurred on canals and river embankments separately for the same series of years as given in Statement G:—

STATEMENT G (1) (*vide* TABLE IV).

Works.	CANALS.					BUNDS.				
	Works.	Establish- ment.	Total.	Revenue collection.	Total.	Works.	Establish- ment.	Total.	Revenue collection.	Total.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1884-85 ...	7,40,540	1,63,796	9,04,336	3,24,972	19,49,808	1,18,211	19,321	1,38,138	1,601	1,24,779
1885-86 ...	7,11,823	2,19,290	9,31,113	3,14,062	12,45,394	1,09,160	22,323	1,48,990	2,213	1,50,752
1886-87 ...	6,62,698	2,28,334	8,91,032	3,28,154	12,13,986	1,65,424	45,599	2,14,020	1,240	2,15,260
1887-88 ...	8,58,788	2,21,296	10,80,084	3,41,424	14,21,448	1,82,743	39,850	2,22,593	716	2,23,359
1888-89 ...	8,68,156	2,20,092	10,88,248	3,90,914	14,14,572	1,17,293	40,969	1,57,862	716	1,58,376
1889-90 ...	8,54,912	2,19,517	10,74,429	4,22,862	15,07,391	1,00,695	29,424	1,30,029	1,042	1,31,071
Average ...	7,78,541	2,16,352	9,94,893	3,55,288	13,45,321	1,33,074	34,581	1,67,655	1,266	1,68,921
1890-91 ...	8,56,769	2,07,731	10,64,440	4,21,192	14,85,542	1,30,590	37,078	1,67,634	899	1,68,333
Difference ...	+83,068	-8,621	+7,447	+65,714	+1,40,191	-12,468	+2,447	-10,021	-367	-10,388

The outlay on canals exceeds the average of the six preceding years by Rs. 83,068, though it is less than that of the previous year by Rs. 8,203. The expenditure on river embankments exceeded that of 1889-90 by Rs. 20,000 but is lower than the average by Rs. 12,468. In both cases the difference is due to the preceding inundation being lower.

21. Statement G (2) following gives the expenditure not charged to Capital incurred on works of extension and improvement for 1890-91 and six preceding years:—

STATEMENT G (2) (*vide* TABLE IV).

Years.	EXTENSIONS AND IMPROVEMENTS.		
	Works.	Establishment.	Total.
1	2	3	4
	Rs.	Rs.	Rs.
1884-85	1,51,847	31,040	1,82,887
1885-86	1,28,984	34,257	1,63,241
1886-87	2,00,615	49,647	2,50,262
1887-88	1,67,420	36,676	2,04,096
1888-89	1,32,558	36,451	1,69,009
1889-90	3,18,798	74,504	3,93,302
Average	1,83,370	43,763	2,27,133
1890-91	3,52,620	71,636	4,24,256
Difference	+ 1,69,250	+ 27,873	+ 1,97,123

The expenditure on works of improvement for the year under review shows a large increase over the average, due to the payments made for the Pritchard Canal and Kashmir Bund loop. Of the total sum expended during the year, Rs. 1,27,891 were for river embankments and Rs. 1,78,549 were spent on the Pritchard Canal, leaving only Rs. 46,180 for the many small works of this kind required in almost every district of the province.

The following is a list of all the Major and Minor works under this head in progress during the year :—

MAJOR WORKS.

42. *Working Expenses (Revenue Account).*

	Rs.	Rs.
Begári Canal—		
1. Widening and clearing Begári Canal	14,999	14,999
Eastern Nára—		
2. Sluice in Rata Bund at Suriah Sang	2,334	
3. Do. at Rata Sang	1,563	
4. Shifting banks, Mithrau Canal	2,128	
		6,425
		21,424

MINOR WORKS.

5. Constructing new loop, Kashmir Bund	*73,567	73,567
6. Constructing stop-gate bridge over Koraiwáh	215	
7. Fixing bench marks, Rohri District	1,836	
8. New loop, Sukkur-Begári Bund	*9,999	12,050
9. Strengthening the Ghár Bunds, viz., Saidabad Jhali, Mithu and Phulu Bunds	*29,002	
Ghár Canal	274	29,276
10. Excavating Pritchard Canal	1,78,549	
11. Improvements to Upper Nurwáh	5,622	
12. Restoration of Lashari Bund	*1,076	
13. New loop to Magsi Bund	*70	
		1,85,317
14. Improvements to Renwáh	16,021	
15. Converting road bridge over Gundí Koriah, ex-Naolakhi, into a regulator... ..	65	
		16,086

NOTE.—The items marked * are ordinary Agricultural works for which neither Capital nor Revenue Accounts are kept.

	Rs.	Rs.
16. Extending Hajipur Bund	1,666	1,666
17. New cut from Baghar to Karara creek	443	
18. Sluice at tail of Ganjbahr, ex-Pinyári	280	
19. New loop to Bhiman Bund, right bank bunds	7,454	
20. New loop on the Uplan, a new loop bund over Chagazo and a new loop bund over Mirzah, left bank bunds	5,057	
	<u>13,234</u>	
Total Minor Works ...		3,31,196
Total Major Works ...		21,424
Total ...		<u>3,52,620</u>

The following list shows outlay incurred on Major works debitable to Capital account of the works noted against each which were carried out or were in progress during the year under review :—

NEW WORKS.

Nára.

	Rs.	Rs.
1. Constructing regulator over Jamrao Sang	10,989	
2. Constructing sluice in Rata Bund in Sariah Sang... ..	3,437	
3. Constructing sluice in Rata Bund at Rata Sang	2,957	
4. Masonry Kariah heads, right bank Nára	1,846	
5. Embankment, right bank, Nára, from Kipra to head of Thar Canal	17,476	
6. Raising Nára bunds from Kakaho to Kilankar	1,303	
	<u>38,008</u>	

Mithrau Canal.

7. Raising portion of Jalab Bund	2,342	
8. Constructing small regulator in 7th mile, right bank branch, Mithrau Canal	124	
9. Constructing an iron road bridge in 28th mile, Mithrau Canal, near Sindri	6,772	
10. Constructing bungalow and out-houses at Samara	724	
11. Masonry kariah heads	607	
Protective embankments	16	
	<u>10,553</u>	

Dim Canal.

12. Road bridge and regulator at 13th mile	16	
13. Road bridge and regulator at 21st mile	318	
14. Extension and improvement	4,613	
	<u>4,947</u>	

Heran Canal.

15. Additions and alterations to sluice	757	
	<u>757</u>	

Kipra Canal.

16. Alterations to head regulator	251	
17. Road bridge, 3rd mile	59	
18. Do. 7th mile	58	
	<u>117</u>	
19. Tail sluice	129	
20. Bungalow at Khaie	635	
21. Out-houses at do.	87	
22. Excavating canal	6,095	
	<u>7,314</u>	

Thar Canal.

23. Baulk shed, Thar Canal	189	
24. Do. Chor branch	122	
25. Darogah's landhi at Umarkot	188	
26. Masonry kariah heads, Thar Canal	862	
27. Do. Chor branch	140	
28. Do. Nurwáh	645	
29. Do. Right bank branch	365	
Do. Umarkot branch	428	
	<u>2,082</u>	
		63,661

NOTE.—There was no Capital Expenditure on Major Works in the Begári Canals District.

The Capital expenditure on minor works, irrigation, was confined to the Fuleli District only and amounted to Rs. 17,474 as under :—

	Rs.
1. Khalásis' quarters and baulk shed at Naushahro ...	2,825
2. Regulator at Gaja below head of Rajwáh ...	4,142
3. Escape channel to Sanhi Guni ...	9,995
4. Reopening old Kazia ...	250
5. Regulating sluices over Kazia, ex-Ghar Mandhar...	260
	<u>17,474</u>

ABSTRACT.

MAJOR WORKS.

	Rs.
Eastern Nára. { Nára ...	38,008
{ Mithrau ...	10,553
{ Dimwáh ...	4,947
{ Heranwáh ...	757
{ Kipra Canal ...	7,314
{ Thar Canal ...	2,082
Total ...	<u>63,661</u>

MINOR WORKS.

	Rs.
Fuleli ...	17,474

22. The following statement shows the establishment charges under the recognised account heads of the year under review and three previous years :—

STATEMENT G (8).

Districts.	CAPITAL EXPENDITURE.									
	1889-90.					1890-91.				
	Outlay.	Establishment Charges.				Outlay.	Establishment Charges.			
		Executive.	Percent- age.	Direction.	Percent- age.		Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.		Rs.		Rs.	Rs.		Rs.	
Begari Canals...	2,156	324	15*	108	5*	...	...	...	...	...
Bhikampur Canals...	...	...	...	...	...	...	...	...	...	...
Ghar Canals ...	...	...	...	...	...	...	...	...	...	...
Western Nára...	...	...	...	...	...	...	...	...	...	...
Eastern Nára ...	58,506	11,701	20*	2,325	5*	65,961	11,789	18*5	2,989	4*6
Hyderabad Canals	...	...	...	...	...	...	...	...	...	...
Fuleli Canals ...	45,144	6,772	15	2,257	5*	17,474	2,621	10*	874	5*
Karachi Canals...	...	...	...	...	...	...	...	...	...	...
Total ...	1,05,506	18,797	...	5,290	...	81,135	14,380	...	5,813	...

Districts.	REVENUE AND AGRICULTURAL EXPENDITURE.									
	1889-90.					1890-91.				
	Outlay.	Establishment Charges.				Outlay.	Establishment Charges.			
		Executive.	Percent- age.	Direction.	Percent- age.		Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.		Rs.		Rs.	Rs.		Rs.	
Begari Canals...	2,45,678	48,446	19*7	12,394	5*	1,82,616	43,973	24*	8,692	4*8
Bhikampur Canals...	87,592	20,460	23*3	4,435	5*	87,525	20,590	23*9	4,114	4*7
Ghar Canals ...	2,78,506	36,529	13*1	14,061	5*	1,63,420	25,665	16*7	7,207	4*7
Western Nára ...	...	...	...	...	...	2,08,454	22,873	8*3	12,369	4*6
Eastern Nára ...	51,532	38,635	75*8	2,608	5*	67,257	32,460	48*4	3,086	4*6
Hyderabad Canals	2,31,254	39,306	17*	11,792	5*	2,04,821	36,354	17*7	9,358	4*6
Fuleli Canals ...	2,17,278	23,338	10*7	11,023	5*	1,96,026	27,501	13*9	9,662	4*6
Karachi Canals...	1,73,068	40,012	23*5	8,744	5*	1,57,016	50,509	30*5	7,658	4*6
Total ...	12,84,318	2,50,997	...	64,897	...	12,29,955	2,50,734	...	61,569	...

* Less due to inclusion of Expenditure in England.

† District formed in 1890-91.

Details of Direction Charges.

	1889-90.	1890-91.
	Rs.	Rs.
Superintending Engineer in Sind...	35,192	29,941
Secretariat and Accounts ...	34,965	35,441
Total ...	<u>70,157</u>	<u>65,382</u>

The charges on account of Executive Direction, Secretariat and Accounts, for 1890-91, compared with those for 1889-90 are as follows :—

						1889-90.	1890-91.
						Rs.	Rs.
<i>Executive</i>	...	...	...	...	...	2,69,794	2,65,114
<i>Direction—</i>							
Superintending Engineer's Office in Sind	...	...	...	...	...	35,192	29,941
Secretariat and Accounts	...	...	...	...	...	34,995	35,441
Total						3,39,981	—3,30,496
Difference						9,485	

The decrease of Rs. 9,485 is made up as under :—

	Rs.
Executive Establishment ...	4,680
Office of Superintending Engineer in Sind	5,251

9,931

Deduct—

Increase in Secretariat and Account charges ...	446
---	-----

9,485

There was in reality an increase in Executive charges due to the formation of the new Western Nára District, but it was more than counterbalanced by the debit to the Buildings and Road branch for expenditure from Provincial and other funds, which was larger in 1890-91 than in the previous years. The decrease in the charge for the Superintending Engineer's office in Sind was due to the disappearance of difference in pay on account of a Military incumbent, and the full pay of the appointment of Superintending Engineer in Sind not being utilised for some time after the death of Mr. Lambert. The slight increase in Secretariat and Accounts was due to more expenditure on irrigation works in 1880-91 than in the previous year.

23. The following statement shows the percentage of expenditure on revenue and the cost of maintenance per acre for the year and the average of six previous years :—

STATEMENT H (*vide* TABLES III & IV).

Years.	Cultivation.	Total Canal Revenue assessed, including Miscellaneous	EXPENDITURE.			Percentage of Expenditure on Revenue.	Cost of Maintenance per Acre.
			Maintenance and Repairs.	Revenue collection.	Total.		
	Acres.	Rs.	Rs.	Rs.	Rs.		
1884-85 ...	1,783,173	37,73,166	10,67,474	3,36,613	14,04,087	37·21	0·79
1885-86 ...	1,739,919	35,77,341	10,79,672	3,16,215	13,95,887	39·02	0·80
1886-87 ...	1,814,650	37,77,985	10,99,852	3,29,394	14,29,246	37·83	0·80
1887-88 ...	1,871,114	38,78,084	13,02,617	3,42,170	16,44,787	42·4	0·88
1888-89 ...	2,118,635	44,69,436	11,81,720	3,91,630	15,73,350	35·2	0·74
1889-90 ...	2,349,819	47,91,745	12,14,558	4,23,904	16,38,462	34·19	0·69
Average ...	1,946,218	40,44,626	11,57,649	3,56,654	15,14,303	37·44	0·78
1890-91 ...	2,203,473	47,04,310	12,22,074	4,22,001	16,44,075	34·93	0·75

The percentage of expenditure on revenue for the year under report is slightly more than that of 1889-80, but considerably below the average. The

cost of maintenance per acre is about the average. Excluding the charge for revenue collection the percentage of expenditure on revenue is about 26, and the cost of maintenance per acre comes to 0.55.

24. The financial results of the irrigation works of the province, excluding minor works for which neither Capital nor Revenue Accounts are kept, are shown in the following:—

STATEMENT I.

Class of Works.	Gross Revenue.	Working Expenses.	Net Revenue.	Simple Interest.	Net Profit.
	Rs.	Rs.	Rs.	Rs.	Rs.
Major works—Productive works	9,10,710	2,93,996	6,16,714	3,30,616	2,86,098
Minor Works, Irrigation and Navigation, for which Capital and Revenue Accounts are kept	13,43,223	5,54,878	7,88,345	...	7,88,345
Minor Works, Irrigation and Navigation, for which only Revenue Accounts are kept.	20,33,154	10,05,219	10,27,935	...	10,27,935
1890-91	42,87,087	18,54,093	24,32,994	3,30,616	21,02,378
1889-90	43,61,669	18,57,082	25,04,587	3,27,492	21,77,095
	-74,582	-2,989	-71,593	+3,124	-74,717

Total collection, Rs. 46,99,762, as under:—

On account of Government land	Rs. 45,08,201
Hakāba and miscellaneous	1,76,492
Four per cent. on $\frac{9}{10}$ of occupancy fees	15,066
Agricultural receipts	3

46,99,762

Figures as above:—

-42,87,087

4,12,675

Difference due to—

(1) Average before improvements	Rs. 4,03,007
(2) Revenue from agricultural works	9,668

4,12,675

Although the net profits are smaller than those of the previous year, they are Rs. 80,158 in excess of the figures for 1888-89, which exceeded those of 1887-88 by nearly 6 lakhs. The decrease is almost entirely under the head Major Works, and is due to the unsatisfactory working of the Begāri and Unharwāhs, and to the unusually good returns from the Eastern Nāra in the previous year from flood.

25. The following statement shows the area irrigated by the 4 Major and 7 Minor works for which Capital and Revenue Accounts are kept, compared with that of the previous year, and also the area which each canal was intended to irrigate:—

STATEMENT J (vide TABLE III).

Canals.	Area irrigable by the complete project.	AREA IRRIGATED DURING		Excess Area irrigated, Columns 2 and 4.
		1889-90.	1890-91.	
<i>Major Works.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Desert Canal	109,500	127,579	124,919	15,419
Unharwāh	18,000	33,840	20,690	2,690
Begāri Canal	104,000	183,479	144,053	40,053
Eastern Nāra	212,631	285,213	228,292	15,661
Total	444,131	630,111	517,954	78,823

Canals.	Area irrigable by the com- plete project.	AREA IRRIGATED DURING		Excess Area irrigated, Columns 2 and 4.
		1889-90.	1890-91.	
<i>Minor Works—Capital.</i>				
Sukkur Canal	About 600,000	90,348	87,199	172,863
Ghár Canal		236,097	253,114	
Fuleli		321,222	332,765	
Mehrabwáh		15,029	13,225	
Alibhar Kacheri		10,236	9,325	
Márak		52,577	49,421	
Sarfráz		26,059	27,814	
Total ...	600,000	751,568	772,863	172,863

The result for the 4 Major works is a decrease of 112,157 acres, and for the Minor works an increase of 21,295 acres, compared with the cultivation of the previous year; the reasons for these have been explained in other places. Under both heads the area of cultivation for the year under review is still considerably in excess of the area contemplated by the projects.

26. There are in Sind 11 works for which Capital and Revenue Accounts are kept. Of these, 4 are classed as Major works and 7 as Minor works.

The following statement shows the financial results (actual) of these works for the year under review :—

STATEMENT J (1).

Canals.	Capital Outlay to end of 1890-91.	GROSS REVENUE.				WORKING EXPENSES.				Net Revenue.	Deduct average before improvement.	Balance or net Revenue due to Capital Expendi- ture.	Per- cent- age of net Revenue on Capital Out- lay.
		Irrigation.		Plan- tations and Miscel- laneous, less re- funds.	Total.	Direct.	In- direct.	Total.					
		Government Land.	Jágírh Lands in Sind and Land in Kheidi.										
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Productive Works.													
Desert Canal.....	12,57,521	*1,42,725	27,773	257	1,70,755	51,344	1,209	52,553	1,18,202	...	1,18,202	9.39	
Unharwáh	8,39,128	45,702	...	27	45,729	15,724	329	16,052	29,677	...	29,677	8.75	
Begári Canal	16,73,079	2,34,938	28,041	314	2,63,293	81,372	1,868	83,240	1,80,058	24,556	1,55,197	9.27	
Eastern Nára Canals.	53,19,019	4,57,114	3,276	18,785	4,59,233	1,35,512	3,579	1,42,151	3,17,084	5,444	3,15,640	9.69	
Total	85,88,747	8,60,539	59,090	10,383	9,29,012	2,87,012	6,994	2,93,998	6,45,016	38,300	6,16,716	7.18	
MINOR WORKS, IRRIGATION AND NAVIGATION, FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.													
Sukkur Canal.....	13,88,713	2,10,283	1,201	1,152	2,12,636	37,437	544	37,981	1,74,655	71,550	1,03,105	7.42	
Ghár Canal	4,40,877	6,97,747	6,292	5,638	7,09,577	1,68,994	2,631	1,71,625	5,38,052	1,16,832	4,21,220	95.05	
Mehrabwáh	67,580	24,393	2	62	24,357	13,466	285	13,751	10,626	...	10,626	18.65	
Alibhar Kacheri	23,917	15,513	380	12	16,905	5,341	108	5,449	11,456	8,427	3,029	12.64	
Márak	2,01,533	93,376	2,457	104	95,837	41,663	866	42,529	33,308	36,459	16,549	8.36	
Sarfráz	1,54,690	39,667	962	336	40,965	22,520	471	23,000	17,995	11,165	6,840	5.48	
Fuleli	11,02,834	5,90,547	22,836	3,830	6,17,223	2,52,217	7,646	2,60,863	3,56,990	1,30,284	2,26,706	20.55	
Total Minor Works	33,50,333	16,72,636	34,160	11,134	17,17,930	5,42,347	12,831	5,54,876	11,63,082	8,74,707	7,88,345	23.5	
Total of both	1,19,39,280	25,33,175	93,250	30,517	26,56,942	8,29,359	19,515	8,48,874	18,08,068	4,03,007	14,05,061	11.77	
Total for 1889-90	1,18,36,379	25,41,825	1,27,135	28,474	26,97,434	8,20,292	16,654	8,36,946	18,00,488	4,03,007	14,57,481	12.30	

* Plus 4 per cent. receipts from sale of occupancy rights.

The percentages of net revenue on Capital outlay for the year under review and for the preceding year are contrasted below :—

<i>Major.</i>	1889-90	1890-91.
Desert Canal	11.55	9.39
Unharwáh	9.04	8.75
Begári Canal	11.44	9.27
Eastern Nára Canal	6.86	5.89
	8.54	7.18

Minor.			1889-90.	1890-91.
Sukkur Canal ...	...	...	7-46	7-42
Ghár ...	...	...	87-67	95-06
Mehrabwáh ...	...	...	8-23	15-65
Alibhar Kacheri ...	...	...	17-96	12-66
Márak ...	...	...	20-02	8-36
Sarfráz ...	...	...	2-21	5-48
Fuleli ...	...	...	17-27	20-55
			<u>21-93</u>	<u>23-52</u>
On Total ...			<u>12-30</u>	<u>11-77</u>

There has been a falling off on all the Major works as explained in other parts of this report. The net result on the Minor works, however, is satisfactory, due to increased earnings from the Ghár, Mehrabwáh, Sarfráz and Fuleli. The decrease on the Márak is very large and is chiefly due to the working expenses being greater by nearly one-half than in the previous year.

The construction estimates of the Begári and Unhar wáhs (Major works in the Upper Sind Frontier) were closed at the end of the year under review under the orders of the Government of India conveyed under Government Resolution No. 107 A. I.—1253 of 1891. The financial results of both these works up to end of 1890-91 are very satisfactory, as will be seen from the following :—

Canals.	Capital Outlay to end of year.	Gross Revenue to end of year.	Working Expenses to end of year.	Net Revenue to end of year.	Simple interest to end of year.	Net profit after paying off interest.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canal ...	16,73,079	46,14,616	21,21,318	24,93,298	11,50,217	13,43,081
Unharwáh ...	3,39,128	2,90,919	99,159	1,91,760	78,298	1,13,462

It is not probable that any further Capital expenditure will be necessary on the Begári; but the Unharwáh must be considerably enlarged to ensure a constant supply for the area that has been cultivated on it, which is greatly in excess of that for which it was designed.

26. Of mileage of canals, there was a net increase of 20 miles, due to 25 miles of the Pritchard Canal brought under operation during the year, a reduction of 7 miles on the length (194 miles) of the Márak and an increase of 2 miles in the Fuleli Canal. There were no additions to the mileage of bunds. The totals for the province under both heads for 1890-91 and the preceding year is given below :—

	Canals.	Bunds.
1889-90 ...	5,924	653
1890-91 ...	5,944	653
	<u>+ 20</u>	<u>0</u>

27. Table VIII, which gives the average discharges of some of the more important canals, clearly illustrates the difference between the inundations of 1889 and 1890. In the former year the total average supply of the four canals in Upper Sind Frontier was 8,128 c. ft. per second, while in the year under review it was only 6,271.

In the Shikárpur Collectorate the total supply of each year was about the same owing to the average supply in the Ghár having risen from 5,053 c. ft. to 5,817 c. ft. on account of the special clearance of the Fordwáh feeder; but this increase was almost balanced by a decrease of 677 feet in the Sukkur Canal and of 104 c. ft. in Sind Canal. In the Hyderabad Collectorate there is a decrease in the total average of 1,874 c. ft. The change of cultivation on the Ghár from jowári to rice, noticed in last year's report, still continues, the area of the former crop having decreased by 27,326 acres and that of the latter increased again by 32,109.

28. The rainfall during the inundation was well distributed and more abundant than in the previous year. It was of great service in many parts of the province in enabling lands to be ploughed in time to take advantage of the full rise of the river, and generally helped in some degree to make up for the deficiencies of the inundation.

The later rains were unusually heavy and caused great damage to the crops that had been reaped, while for the growing rabi they were in some places useful and in others prejudicial.

29. Mr. Lambert was in charge of the Division till his death in August 1890, when Mr. R. B. Joyner took charge, pending the arrival of Mr. H. M. Thompson in November of the same year.

The following Executive officers were in charge of the districts noted opposite their names :—

1.	Mr. T. W. deWinton	...	...	Begári Canals.
2.	" P. P. Chandanani	...	...	Shikárpur Canals.
3.	" H. J. Landon	...	...	Ghár Canals.
4.	" R. R. Menneer	...	...	Western Nára Canals.
5.	" W. L. Cameron	...	...	Eastern Nára Canals.
6.	" R. B. Joyner	...	...	Hyderabad Canals.
7.	" A. S. M. Ritchie	...	...	Fuleli Canals.
8.	" John Tate	...	...	Karáchi Canals.

DIVISIONAL REVIEW.

BEGÁRI CANALS DISTRICT.

1. *Kashmor Bund*.—The abkaláni establishment was kept up at the same strength as in the previous year, but it was not appointed till 1st June, or five days later. There were no leaks in the bund and the height of water against it was less than that of the previous year except at the 39th mile gauge where the same reading was recorded. The new loop or retired bund was completed on the 25th July at a cost of Rs. 1,81,666. This work was necessary on account of the continued approach of the river to the bund just south of Kashmor; shortly after the loop was completed a change took place in the river which having come to within 170 feet of the toe of the bund suddenly took another course several miles to the east, leaving a dhand of comparatively speaking still water in its old course.

2. *Desert Canal*.—This canal was opened on the 25th May and ceased flowing on 14th September. The supply was good, and although the average was less by some 500 c. ft. per second than that of 1889, the area cultivated was the largest yet recorded, amounting to 114,796 acres. In the previous year the excellent supply due to the inundation was not expected, and this year the cultivators anticipating a repetition of it were ready to take full advantage of all the water available. In the previous inundation flood-water from the north had crossed the mouth of this canal, and the silt deposited from this cause had to be removed at a cost of Rs. 11,329. This flood, though in less quantity, crossed this year also, and while it lasted was of great help to the canal.

3. *Begári Canal*.—Water flowed in this canal from 25th May till the 16th October; the supply was not good, averaging some 1,000 c. ft. per second less than that of the previous year; it was also late in reaching a useful height and fell very suddenly. The first 10 miles of the canal had been cleared at a cost of Rs. 14,975 and some work was done at the tail to improve the supply in the Edenwáh. The river was unsettled and depositing silt in the dhand which feeds the canal, and the deficiency is due to this and to the general character of the inundation. The area cultivated was the smallest since 1883.

4. *Unharwáh Canal*.—Water did not flow in this canal until the 31st May and the supply was poor, the cultivation being the lowest yet recorded. This canal suffers from the same cause as affects the Begári as they are both fed from the same dhand. On this canal and on the Begári a considerable increase is noted in the area of bájri cultivation due to the lateness of the arrival of the full supply.

5. The total canal revenue and charges against it are shown in the following statement :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.		
1886-87	4,44,542	1,79,780	3,06,078	40·4	68·8
1887-88	4,54,979	1,96,853	2,52,249	48·27	55·44
1888-89	6,34,190	2,12,066	2,15,997	33·44	34·05
1889-90	5,67,007	2,12,959	3,52,634	37·55	62·19
1890-91	4,88,752	1,62,279	2,75,863	33·22	56·64

The returns from this district are unsatisfactory owing to the character of the inundation and the action of the river on the mouth of the Wadhu Dhand which feeds the Begári and Unharwáhs.

SHIKÁRPUR CANALS DISTRICT.

1. This district comprises an area of 5,424 square miles containing 338 miles of canals and 90 of river embankments.

2. The Sukkur-Begári Bund remained staunch throughout the season ; erosion opposite the 20th mile ceased, but commenced with great force opposite the 10th mile. Considerable progress was made in strengthening the bund by increasing the front slope to 5 to 1 where most exposed.

3. The Sind, which is the most important canal in the district, worked exceptionally well, the river throwing a bar across the tail of the dhand which feeds it, appears to have banked up the water.

4. The canals were all well cleared, but the expenditure on those in Rohri was practically useless, as the whole of this tract was again flooded by the local and Bahawalpur floods, after which most of the country is sown with rabi and the canal water is not used, while the canals themselves are greatly damaged.

5. The following statement shows the revenue collection and the charges for the year under review and for the four previous years :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	3,18,769	1,62,045	1,84,627	58·3	57·9
1887-88	3,28,082	1,86,771	2,38,852	58·06	72·80
1888-89	3,60,796	1,16,525	1,36,486	32·30	37·82
1889-90	3,61,663	1,49,635	1,58,957	41·37	42·56
1890-91	3,49,135	1,31,322	1,46,458	37·62	41·95

The revenue collected shows a small decrease, but it is satisfactory considering the loss to the canals from the floods in Rohri.

GHA'R CANALS DISTRICT.

1. *Ghár Bund*.—Although the inundation was on the whole lower than that of the previous year, the water stood higher against this bund, causing several leaks, all of which, however, were quickly closed until a small sluice in the Jhali Bund was carried away, causing a flood which did considerable damage in the Naushahro, Rato-dero and Kambar talukas. Rs. 21,817 were spent in strengthening several weak portions of this bund and it may be said to be now in fair condition.

2. The Sukkur Canal was opened on 10th June and worked well throughout the season, giving a good supply notwithstanding the low inundation. The old head was opened on 1st November for rabi, and as the river was higher than usual throughout the rabi season, it gave an excellent supply.

3. The Ghár was opened on 10th June, the opening was delayed a little on account of the new bridge building at Lárkhána. The Fordwáh having been thoroughly cleared was opened on 22nd and contributed greatly to the good supply in the main canal and all its breaches throughout the whole season. There were some breaches in the Naorang and Chilo, which were closed before much damage had been done.

4. The following statement shows the revenue collection and the charges for the year under review and for the four previous years, excluding those for canals and bunds now forming part of the Western Nára District:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	6,57,048	1,62,811	1,95,336	24.78	29.73
1887-88	6,34,863	1,82,533	2,04,311	28.75	32.18
1888-89	7,88,065	1,82,135	2,65,146	23.12	33.65
1889-90	8,61,021	1,64,196	1,79,235	18.60	20.82.
1890-91	9,22,526	2,22,778	2,59,385	24.15	28.12

There is a considerable increase in the collections, due to the Ghár and Sukkur canals, and the increase in charges is due to larger expenditure on clearance and special repairs to river embankments with the extra cost of collection.

WESTERN NÁRA DISTRICT.

1. This district was formed on the 1st of April preceding the inundation under review with the object of placing the whole of the Western Nára in one charge. It is made up of portions of the Karáchi Canals and Ghár Districts, between which the Western Nára was before divided.

2. The Western Nára, which had been bunded to allow of work proceeding in the Pritchard Canal, was opened on the 7th June. The canal itself worked well, but the supply was deficient owing to the character of the inundation. After the first fortnight, during which the river was eroding at the mouth and endangering the supply, it suddenly left and for the rest of the season the mouth worked well.

3. The Pritchard Canal, designed to assist the Nára in the Sehván District, was opened for the first time on the 14th of July. Unfortunately the dhand from which the canal was to have taken its supply became the main channel of the river just when work was completed, and active erosion commencing just about the mouth caused a large deposit of sand to be swept into the canal. The river continues unfavourable, and until a change takes place the full benefit of the feeder will not be felt.

4. The Manchar lake did not fill well, and a considerable area of wheat was submerged by heavy rain floods from the hills in December. The working of the Aral is still unsatisfactory, and it seems hopeless to improve it in the present position of the river.

5. The Nára Bund was not severely tried, there were no breaches and no floods.

6. The following statement shows the collection and charges for the year and for four preceding years for the canals and embankments now included in this district :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	6,11,831	1,62,830	1,86,879	26·61	30·54
1887-88	5,96,120	1,76,876	1,81,804	29·67	30·49
1888-89	6,01,576	1,51,317	1,77,728	25·14	29·54
1889-90	6,60,292	1,74,452	3,23,366	26·42	48·97
1890-91	6,07,244	1,56,637	3,66,798	25·79	60·40

There is a decrease apparent in the collections, and the increase in charges is due to the expenditure on the Pritchard Canal.

EASTERN NÁRA DISTRICT.

1. This district contains 293 miles of canals, and the Mithru and the Thar protective embankments, in an area of 3,200 square miles.

2. Rs. 40,924 were spent on ordinary clearance with no special object, and although there is a decrease of cultivation since last year, the water-supply was ample in all canals, except perhaps in the Dimwáh, which still suffers from the quick growth of weeds. The principal decrease of cultivation was in the Nára, but it can hardly be called a decrease, as the area cropped in the previous year was unusually large owing to the flood. On the Thar there was a decrease of 6,700 acres, said to be due to the spread of “kalar” or “reh” from over-irrigation. The Kipra Canal shows an increase of 7,062 acres, due to the natural extension.

3. *Nára*.—The supply channel regulator was opened on the 1st May and the new water reached the Jamrao Sang on the 3rd, the Mithrau on the 5th, Jatri on the 8th, and Ketí on the 12th. The gates of Ketí sluice were kept closed till 18th May and the Thar Canal was opened on the 20th. The supply channel regulator was kept open till the end of July, and all the water passed down was required and sufficient for the cultivation. On the approach of flood water from the north the regulator at Rohri was closed, but notwithstanding the gauges at the 12th mile read 2' 7" more than was required, with the result that breaches occurred in the Nára between Kipra and the head of the Thar, which flooded a considerable area of cultivation.

4. *Jalab Bund*.—This bund was extended a short distance to the north after the inundation of 1889, but it was again outflanked and water passed round it, reaching as far as the Dimwáh, but doing no damage. The bund itself remained staunch, but towards the end of August the pressure in the angle between it and the Mukki Bund became so great that it was necessary to cut the latter.

5. *Bhaiti Bund*.—The northern portion of this bund was completed before the flood, causing a larger flow of water than usual out of the Nára to the south. This flood touched the Mithrau protective embankments from 45 to 56th mile.

Bunds, Left Bank.—On this bank the bunds between Kurthari and Maroi were severely tried and several breaches occurred which, however, were closed. The water level against these bunds was only 1 foot below that of 1878.

Mithrau Canal.—This canal was closed for repairs from 27th March to 15th May. The supply was excellent throughout the season. The maximum supply admitted was 8·7 feet and the highest reading in front of the regulator was 14·20 against 14·55 in 1875.

6. *Kipra Canal*.—Water only entered this canal on 19th June and then only 0·8 feet deep. The supply, however, was very fair, and notwithstanding that weeds gave some trouble the area of cultivation has increased.

7. *Thar Canal*.—Water was admitted on 20th May and the supply was ample throughout the season.

General.—The crops were good, but the grain was damaged by rain in November. Flocks of locusts appeared at times but passed away without doing any damage. The young are reported to have been destroyed by large flocks of birds.

8. The financial results and charges against revenue are shown in the statement below :—

Years.	Total Canal Revenue collection.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	2,75,293	91,036	91,036	33·06	33·06
1887-88	3,31,680	87,063	87,063	23·23	23·23
1888-89	4,05,787	1,23,600	1,23,600	30·46	30·46
1889-90	4,98,950	1,29,132	1,31,557	25·88	26·36
1890-91	4,59,233	1,29,617	1,36,572	28·23	30·18

The figures bear favourable comparison with those of previous years with the exception of those of 1889-90, which being a year of greater flood, was exceptional.

HYDERABAD CANALS DISTRICT.

1. This district contains 1,663 miles of canals, but practically no river embankments.

2. The supply, though late in reaching the canals, was on the whole good and the crops very fair. There were practically no remissions on account of want of water, but some Rs. 10,000 were remitted in connection with alterations of settlements.

3. The expenditure on clearance amounted to Rs. 1,74,000 and was devoted to the usual work, special attention being paid to the increase of work in the tails of the branch canals. Improvements to the Renwāh, estimated to cost Rs. 60,087, were commenced; they are intended to increase the supply in the tail branches by enlarging and embanking the main canal.

4. The canals all worked well although water did not reach them before the early part of June, and fell rapidly in September; it was supplied better than usual. The returns show a decrease in the area of cultivation, which is due to late and short inundation; while the increase apparent on the revenue is accounted for by changes in the settlement of the Tando Alahyār Taluka of the Hyderabad Collectorate.

5. During 1890 no very particular changes took place in the river. The upper end of the dhand which feeds the Dadwāh was silted and the lower end opened out approaching the lower Naolakhī head. In the southern part the tendency is towards the left bank.

6. The total revenue collected and the charges against it are shown in the following statement :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	6,27,840	2,33,164	2,33,164	37.1	37.1
1887-88	6,40,454	2,37,242	2,37,288	37.04	37.05
1888-89	6,93,687	3,24,064	3,36,922	46.72	48.57
1889-90	7,50,917	2,91,483	3,52,147	38.82	46.89
1890-91	7,76,424	3,02,707	3,22,522	38.99	40.15

These figures are very satisfactory and show a steady increase of revenue and decrease of percentage of charges on it.

FULELI CANALS DISTRICT.

1. This district, almost the whole of which is watered by the Fuleli Canal and its branches, contains 1,143 miles of canals and 12½ miles of river embankments in an area of 3,380 square miles.

2. The Fuleli is fed through two mouths, the new or principal one was opened on 1st March, but the old mouth did not flow till 3rd June when Bukkur gauge read 7' 10" and it stopped on 21st October, the same gauge reading 5' 3". The average kharif discharge of the combined mouths may be taken at 9,000 c. ft. per second in a fair inundation, and as about ⅓rd of the total cultivation on this canal is "lift," a duty of 45 acres to the cubic foot may be expected when the distribution of the water has been improved and the numerous branch canals made capable of carrying it to the fields. The best means of attaining these ends are now being carefully considered and as a first step two new regulators have been sanctioned, one on the old mouth to improve the supply in the Hyderabad Taluka, and another on the Main Canal with the object of increasing the cultivation in Dero Mohbat and preventing the great waste of water in the tail branches.

3. The crops were generally good and there is a slight increase of cultivation, but this satisfactory result is due in a great measure to the ample and timely rainfall in June, July and August. Most of the branch canals did not flow till the second week in June, and if it had not been for the rain, the fields would not have been ready for sowing when the river reached the height necessary to irrigate them. By the 15th August all canals were flowing full, and it was necessary to close the regulator lately constructed on the new mouth. Although the high lands of the Dero Mohbat suffered somewhat from this cause, the south-eastern talukas benefited greatly, being saved from the disastrous flooding from which they suffered in 1886 when the river reached the same height. There were, however, several breaches in the tail branches, and complete immunity from these cannot be looked for until the regulator above-mentioned has been constructed and an escape for all surplus water provided direct to the sea.

4. In the season before the inundation Rs. 1,92,848 were spent on canal clearance and repairs. The work was of the usual kind and nothing special can be said regarding it except that more attention than usual was given to opening out the tails of canals and with beneficial results.

5. The only new work completed and in operation during the inundation was the re-opening of the old Kaziayáh, which having cost Rs. 14,389, gave an increase of 4,223 acres of cultivation in this its first year. The construction of a regulator in the Gaja below the head of the Rajwáh and the making of an escape for the Sanhi Guni were in progress but not completed before the inundation.

6. There were a few leaks in the river embankments which were closed before they attained the dimension of breaches. On the whole this district fared well during the inundation, there were no remissions for want of water and the returns compare favourably with those of the previous year, which were exceptionally good.

7. The financial results and charges against revenue are shown in the following statement:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.		
1886-87	5,07,009	2,14,374	2,14,374	42·2	42·2
1887-88	5,54,389	2,76,408	2,76,408	49·86	49·86
1888-89	5,86,517	2,81,063	2,81,063	47·92	47·92
1889-90	6,45,166	2,96,778	3,02,749	46·00	46·92
1890-91	6,64,151	2,86,228	2,88,308	43·09	43·41

The figures show a steady increase in the collections, and although the charges have also an upward tendency their percentage on collection is gradually decreasing.

KARÁCHI CANALS DISTRICT.

1. In this district there are now 112 miles of canals and 151 miles of river embankments. On the 1st April 1890 the Sehwan sub-division with 153 miles of canals and 5 miles of bunds were handed over to the new Western Nára District.

2. With the exception of the Pinyári and Baghar, which are generally perennial, none of the canals in this division could be opened before the early part of June, but the cultivation does not appear to have suffered from this, as the rise afterwards was steady. Both the Baghar and Pinyári ceased to flow for a short time when the river was at its lowest in the cold season, but in both the supply during the inundation was ample, and if it had not been for the extraordinary height to which the river attained in the latter end of August, the returns from this division could have been excellent.

3. Special clearance to a levelled bed was carried out on the Kalri, in which canal the supply had been unsatisfactory for some years. The result was satisfactory and all the cultivators were satisfied with their supply. On the other canals the clearance work done was about the average, but that it was sufficient may be gathered from the absence of any remissions for want or deficiency of water. The actual expenditure on clearance was Rs. 1,42,624, of which 28,403 were spent on river embankments, Rs. 13,233 on the right and Rs. 15,170 on the left bank. Of this expenditure Rs. 4,675 were for repairing sluices and the rest on earthwork, including Rs. 906 for jungle cutting.

4. In the river embankments on the right bank there were only two breaches which were quickly closed. On this bank however two of the embankments were outflanked, that in the Shal Tuppa by a flood through the Suf Shoro Jágíhír which destroyed almost the whole Shal cultivation, and the high land north of the Hilayah Bund was for the first time overflowed, causing a flood which did considerable damage to the cultivation on the Jharik Canals. This gap has since been closed. The left bank as usual appears to have suffered most, as there were 11 breaches in this line of embankment, two of which occurred at sluices and in some the water overtopped the bund, while others occurred from leaks which happening in bad soil could not be closed. The damage done by these breaches was considerable and is shown by the returns. The rise of river level in this district and its persistent set on the left bank are remarkable, and must be met by increased expenditure on the embankments both on work and re-alignment.

5. The only new work in operation during the inundation was the new cut for the Baghar to the Kharira creek, which answered well, giving a profit of 13 per cent. on its first year's working, with every prospect of considerable improvement.

6. The remissions of the district amount to Rs. 41,430, of which Rs. 10,555 were given on account of the damage done to crops by rats and the rest on account of the floods above mentioned. In the previous year Rs. 56,815 were remitted on account of flooding, and it is very satisfactory to note that the damage in the year under review was not much more than half this, although the height of the water was greater.

7. There were no marked changes in the set or course of the river during the inundation, erosion continuing with greater or less activity in the same places.

8. The financial results and charges of this district are shown in the following statement, in which however the figures given cannot be compared with those in similar statements of previous reports which included the collections and charges in the Sehwan sub-division which now forms part of the Western Nara Canals District :—

Years.	Total Canal Revenue collection.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collection.	Percentage of total Charges.
		Maintenance and Revenue collection.	Total Charges against Revenue.		
	Rs.	Rs.	Rs.		
1886-87	3,56,089	2,23,206	2,68,014	62.40	75.27
1887-88	3,63,305	3,00,041	3,63,908	82.50	101.81
1888-89	3,88,229	1,82,580	2,05,417	47.03	53.68
1889-90	4,18,957	2,19,827	2,36,119	52.47	56.35
1890-91	4,32,294	2,52,487	2,76,525	58.41	62.58

There is a slight increase in the collection which is accounted for by the inundation being more favourable for this district than for any of the others, and the increase in charges is due to expenditure on river embankments.

H. M. THOMPSON, M.Inst.C.E.,

Superintending Engineer in Sind.

Office of Superintending Engineer in Sind, }
Camp Bakora, 24th December 1891.

TABLE I.

Cultivation and Water-share of Net Consolidated Revenue for 1890-91 and three previous years.

CANALS AND DISTRICTS.	1887-88.		1888-89.		1889-90.		Average.		1890-91.	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.*	Revenue.	Area.	Revenue.
1	2	3	4	5	6	7	8	9	10	11
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Begari Canals ...	29,107	89,722	69,175	1,24,214	92,777	1,48,221	67,515	1,20,719	81,668	1,46,916
Unharah ...	29,006	53,155	45,122	79,185	33,460	69,271	35,473	61,107	29,690	37,329
Begari Canal ...	126,287	2,30,789	163,264	3,10,119	141,533	2,75,101	143,678	2,72,003	118,225	2,34,411
Kashmor Bund ...	3,840	6,938	3,625	6,134	5,365	9,954	4,276	7,649	4,259	5,151
Canals in Rohri ...	76,654	1,88,096	82,978	2,03,550	72,656	1,81,934	7,187	1,04,189	59,603	1,03,627
Shikarpur Canals.										
Sind Canal ...	49,912	1,31,377	55,055	1,51,585	83,645	1,71,210	53,511	1,53,391	61,738	1,76,365
Sukkur-Begari Bund ...	70,721	1,05,122	76,773	1,08,914	88,287	1,20,821	60,580	1,01,419	85,254	1,15,611
Ghar ...	162,800	4,96,005	214,385	5,86,184	227,551	6,62,041	196,391	5,61,610	232,990	7,00,431
Nara ...	127,998	3,80,867	131,168	4,02,556	151,225	4,18,824	135,400	4,00,785	...	...
Nahar ...	5,410	10,814	5,191	11,370	6,721	13,442	16,982	...	...	...
Harri ...	3,689	9,903	4,102	10,406	4,128	10,212	3,976	10,272	...	...
Ghar Bunds ...	713	475	35	95	...	...	56	80	...	...
Nara ...	...	...	...	...	...	...	...	...	165,079	5,32,157
Fritchard Canal ...	...	...	...	...	...	...	...	...	3,077	7,790
Wahar ...	...	...	...	...	...	...	...	...	6,186	15,256
Harri ...	...	...	...	...	...	...	...	...	4,184	11,307
Dikka ...	...	...	...	...	...	...	...	...	6,291	15,723
Dikh Canals ...	...	...	...	...	...	...	...	...	10,740	19,416
Nara Bunds ...	2,402	6,233	3,023	7,783	6,723	16,442	1,074	10,121	8,043	15,143
Nara Supply Channel ...	24,760	31,837	28,307	52,002	66,094	1,08,001	49,180	61,947	50,091	67,736
Eastern Nara ...	104,992	4,05,487	121,831	2,31,776	122,171	2,40,675	116,834	2,27,013	110,949	2,33,543
Mithra Canal ...	7,571	4,159	3,149	5,310	9,237	10,359	5,016	...	...	...
Dunwah ...	2,675	4,810	2,500	4,239	4,453	7,173	3,791	2,310	3,130	4,601
Kipra Canal ...	31,785	62,332	44,387	85,153	48,772	90,244	41,808	79,336	37,767	84,964
Thar Canal ...	1,110	3,816	1,400	14,800	23,548	14,800	23,548	14,800	13,010	21,913
Nasrat ...	18,267	44,760	22,638	53,202	25,671	50,266	33,330	54,409	23,451	53,336
Nasakhi ...	48,833	1,07,778	51,938	1,14,091	62,733	110,927	50,588	113,132	48,504	1,06,164
Dandru ...	71,728	15,172	7,440	16,312	9,596	20,290	8,068	17,305	10,750	22,900
Dudwah ...	29,515	45,810	24,923	42,466	24,369	51,291	21,647	50,558	26,612	55,092
Renwah ...	16,998	29,335	13,815	26,490	14,150	27,542	14,339	27,189	16,927	31,761
Kilbar Kacheri ...	57,729	12,206	5,938	12,371	8,898	18,126	6,961	14,227	8,666	16,294
Vasat ...	37,708	78,687	40,741	85,508	45,397	92,840	40,128	89,911	42,247	92,910
Qahro Mahmuda ...	44,923	91,262	48,938	97,201	53,292	1,12,178	49,711	1,09,134	57,406	1,18,714
Kati Shigpali ...	38,004	90,431	34,316	46,601	36,078	51,610	33,023	46,035	33,759	70,791
Kastwah ...	26,431	47,851	27,873	106,410	86,791	14,582	27,548	40,832	39,203	61,529
Sarfnawah ...	19,004	26,287	40,690	32,478	30,756	34,980	19,490	32,738	22,493	39,351
Other canals ...	33,075	48,333	22,301	47,584	26,337	56,040	21,305	51,226	26,572	58,046
Fulhi ...	29,510	4,88,818	24,577	1,04,201	26,732	5,61,687	24,650	5,17,453	...	...
Other canals ...	16,320	40,559	17,317	42,458	31,181	55,453	21,873	40,473	18,349	45,687
Nara ...	5,907	1,28,451	54,064	1,18,798	70,758	1,55,482	69,927	1,31,054	...	...
Phatta ...	5,242	10,120	4,716	9,443	5,332	11,918	5,170	10,064	...	...
Canals north of Kotri ...	14,314	28,121	14,410	26,609	17,743	35,382	15,311	30,708	14,290	17,177
Kairi ...	8,350	20,381	10,650	22,491	11,748	24,916	10,255	22,710	11,759	20,271
Baghar ...	16,361	29,273	18,867	38,713	22,851	48,891	19,399	38,700	22,740	37,556
Uchita ...	10,567	33,455	10,535	33,211	9,589	19,976	10,331	21,385	12,016	25,032
Canals in Tutta, &c ...	7,566	12,209	11,373	19,399	10,440	28,014	9,907	16,714	11,023	19,945
Shal Canals ...	2,799	7,107	3,021	6,494	2,965	7,498	2,926	7,033	2,834	7,363
Fuyari ...	65,703	1,69,341	66,224	1,69,263	77,944	1,66,658	70,278	1,65,689	68,448	1,61,357
Canals in Mijpur Batoro ...	10,848	37,383	13,359	37,569	17,743	37,115	12,168	37,406	14,163	37,406
Canals in Sujawal ...	6,478	14,942	6,670	17,183	7,761	13,201	7,069	15,143	7,221	15,974
Satta ...	9,279	18,458	8,564	17,327	9,543	12,817	9,137	18,027	10,990	18,635
Canals in Jati ...	5,222	12,574	5,222	12,574	5,222	12,574	5,222	12,574	5,222	12,574
Khanta ...	5,222	12,469	4,623	11,529	5,003	11,767	4,942	11,860	5,415	9,174
Kokawari ...	14,000	24,032	8,211	18,710	12,345	28,290	10,869	24,639	13,247	28,401
Canals in Shihbandar ...	4,463	3,400	1,106	3,370	1,694	3,831	1,521	3,567	2,027	4,459
Bunds, left bank ...	...	...	...	...	...	...	...	...	...	...
Bunds, right bank ...	...	...	...	...	...	...	...	...	...	...
Begari Canals District ...	209,490	1,80,624	279,246	5,20,162	265,513	4,83,247	250,780	4,64,675	225,155	4,26,013
Shikarpur Canals ...	126,287	3,23,773	131,168	3,55,136	131,543	3,56,162	133,097	3,44,490	121,941	3,28,908
Ghar Canals ...	37,104	10,31,119	428,552	12,10,725	478,032	12,99,587	428,564	11,90,377	313,550	9,24,045
Western Nara ...	...	...	...	...	...	...	...	...	...	...
Eastern Nara ...	164,143	5,16,892	214,700	3,80,314	281,693	4,84,678	221,166	3,96,585	225,272	4,94,223
Hyderabad Canals ...	301,704	8,18,847	324,970	6,04,710	350,225	7,29,255	336,765	6,69,250	359,252	7,24,135
Fulhi Canals ...	23,094	8,29,125	233,491	4,46,170	298,916	6,36,540	292,923	7,04,138	296,281	6,35,705
Karachi Canals ...	224,212	5,27,269	242,071	5,29,031	262,122	6,04,723	255,253	5,67,000	194,547	4,29,200
Total ...	1,653,637	37,20,291	1,887,586	42,25,697	2,109,504	46,83,932	1,883,601	41,76,639	1,955,157	45,97,915

NOTE.—The figures in this statement are based on assessments.

TABLE II.

Area of Cultivation and Canal Revenue for 1890-91 and five previous years.

Years.	CULTIVATION.			Water share of net consolidated Revenue.	Hakaba.	Miscellaneous.	Total Canal Revenue.
	Government.	* Jaggir.	Total.				
1	2	3	4	5	6	7	8
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	1,532,722	307,197	1,739,919	24,33,150	96,387	48,214	35,71,541
1888-89 ...	1,303,056	290,994	1,594,050	22,80,499	1,10,023	48,743	34,39,245
1889-90 ...	1,603,027	217,487	1,820,514	37,20,291	1,12,203	42,80	38,78,084
1890-91 ...	1,867,556	231,979	2,109,535	43,35,197	1,04,135	49,704	44,89,036
1891-92 ...	2,109,804	240,615	2,350,419	45,83,972	1,12,646	52,167	4,79,145
Average ...	1,555,476	228,252	1,783,728	39,10,532	1,19,070	49,316	40,38,918
1900-91 ...	1,955,157	1218,316	2,203,473	45,27,415	1,21,290	53,102	47,04,710
Increase or Decrease ...	+199,682	+21,964	224,646	+6,17,293	-17,880	-5,719	+6,06,292

* Includes land in Kharat watershed by British Canals.

† For details vide Table III-A.

NOTE.—The figures in this statement, with the exception of Hakaba and Miscellaneous, which are actual realizations, are based on assessments.

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TABLE III.

Area of Cultivation and Canal Revenue for 1890-91.

Canals, Executive Districts and Collectorate.	Cultivation.			Water share of net consolidated Revenue as in Table VII.	Hakāba.	Miscellaneous.	Total Canal Revenue.
	Government.	Jāghir.	Total.				
1	2	3	4	5	6	7	8
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
Begāri Canals ...	Desert Canal ... 81,668	43,251	124,919	1,46,916	27,773	257	1,74,946
	Unharwāh ... 20,690		20,690	27,399		27	37,426
	Begāri Canals ... 118,238	25,815	144,053	2,33,411	28,041	314	2,61,766
	Kashmor Bund ... 4,559		4,559	8,287		447	8,734
Shikārpur Canals ...	Canals in Rohri ... 59,603	7,159	66,762	1,62,627	2,819	1,425	1,66,871
	Bunds in Rohri ...					30	30
	Siud Canal ... 61,738	4,789	66,527	1,76,366	2,587	370	1,79,323
	Sukkur-Begāri Bund ...					384	384
Ghār Canals ...	Sukkur Canal ... 85,354	1,845	87,199	2,11,611	1,201	1,162	2,13,964
	Ghār ... 232,996	20,118	253,114	7,00,484	6,292	5,638	7,12,364
	Ghār Bunds ...					213	213
Western Nāra ...	Nāra ... 185,979	21,394	207,373	5,32,157	8,433	10,074	5,50,666
	Pritchard Canal ... 3,027		3,027	7,790		167	7,917
	Wāhur ... 6,186		6,186	16,286		79	15,305
	Marvi ... 4,134		4,134	11,367		909	12,276
	Phitta ... 6,891	815	7,706	15,753	89	297	16,149
	Dādā Canals ... 10,740	338	11,078	19,416	136	4	19,556
	Nāra Bunds ...					82	82
Eastern Nāra... ..	Nāra Supply Channel ... 6,043	3,159	9,202	15,143	1,183	6,420	21,746
	Eastern Nāra ... 50,091		50,091	67,786		11,398	79,184
	Mithrau Canal ... 110,566		110,566	2,23,543		1,442	2,34,985
	Dumwāh ... 7,272		7,272	12,232		4	13,236
	Heranwāh ... 2,340		2,340	4,651			4,651
	Kipra Canal ... 9,273		9,273	14,954		5	14,959
	Thar Canal ... 37,757	1,761	39,518	64,946	2,093	514	87,553
	Agricultural receipts ...					2	2
Hyderabad Canals ...	Mohrabwāh ... 13,010	215	13,225	24,043	2	62	24,107
	Nasrat ... 23,464	639	24,103	55,356	205	496	56,057
	Naokakhi ... 48,502	1,980	50,482	1,08,164	510	310	1,08,984
	Dambro ... 10,739	1,320	12,059	22,909	449	235	23,613
	Dadwāh ... 26,612	6,142	32,755	55,092	1,970	632	57,694
	Renwāh ... 16,977	165	17,142	31,761	42	257	32,060
	Alibhar Kacheri ... 6,056	1,269	7,325	16,396	380	12	16,788
	Mārā ... 42,247	7,174	49,421	92,970	2,267	104	95,331
	Ghāro Mahmūda ... 57,406	14,289	71,695	1,18,744	3,553	524	1,22,821
	Kari Shumali ... 33,759	8,909	42,668	70,704	2,406	335	73,445
	Nasirwāh ... 29,259	2,529	32,068	67,599	557	241	68,397
	Sarfranzwāh ... 22,589	5,238	27,814	39,351	992	236	40,679
	Other canals ... 26,572	1,556	28,127	58,046	540	412	58,998
Fuleli Canals... ..	Fuleli ... 217,534	55,231	272,765	5,90,018	22,336	3,380	6,16,684
	Other canals ... 18,549	1,765	20,314	45,687	584	335	46,606
Karāchi Canals ...	Canals North of Kotri ... 7,293	1,170	8,463	17,177	384	161	17,722
	Kalri ... 11,780	358	12,138	26,271	200	348	26,819
	Baghar ... 23,707	2,356	26,063	52,583	259	233	53,065
	Uchita ... 12,016		12,016	23,627		617	24,244
	Canals in Tatta, &c. ... 11,032	1,167	12,199	19,965	717	329	21,011
	Shal Canal ... 3,143		3,143	3,568		16	3,578
	Pinyari ... 66,448	1,776	68,226	1,61,827	765	3,723	1,66,315
	Canals in Mirpur Batore... 16,168		16,168	39,074		45	39,119
	Canals in Sujawal ... 7,321	334	7,655	15,313	32	23	15,368
	Satta ... 10,306	237	10,543	16,657	42	14	16,713
	Canals in Jati ... 2,464	39	2,503	4,739	16	5	4,759
	Khanta ... 5,415	131	5,546	9,174	82	48	9,304
	Kokawari ... 13,427		13,427	28,461		813	29,274
	Canals in Shahbandar ... 2,027	276	2,303	4,459	70	5	4,534
	Bunds, left bank ...	319	319		185		185
	Bunds, right bank ...	999	999		497		497
	Agricultural receipts ...					1	1
Begāri Canals ...	...	225,135	69,066	294,221	4,26,013	55,814	4,82,572
Shikārpur Canals ...	...	121,341	11,948	133,289	3,38,393	5,406	3,46,606
Ghār Canals ...	...	318,350	21,963	340,313	9,12,045	7,493	9,26,541
Western Nāra ...	...	217,057	22,647	239,694	6,01,768	8,670	6,21,981
Eastern Nāra ...	...	223,372	4,920	228,292	4,34,255	3,276	4,66,316
Hyderabad Canals ...	...	359,252	51,712	410,964	7,56,138	14,063	7,74,174
Fuleli Canals ...	...	296,683	56,926	353,609	6,25,705	23,490	6,63,290
Karāchi Canals... ..	...	194,547	9,164	203,711	4,22,900	5,248	4,32,528
Total ...	...	1,955,167	248,316	2,203,473	45,27,815	1,21,390	47,04,310

Note.—The figures in this statement, with the exception of Hakāba and Miscellaneous, which are actuals, are based on assessments.

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TABLE III.A.

Area of Cultivation, Assessments and Realizations and Balances outstanding in respect of Lands in Khelati and Jâghir Lands in Sind for 1890-91.

Canals and Executive Districts.		AREA CULTIVATED DURING YEAR.			Unrealized Balance at end of last year.	ASSESSMENT OF THE YEAR.			Remissions.	Total for collection.	Actual Realizations.	Balance outstanding at end of year.	
		Kharrif.	Rabi.	Total.		Kharrif.	Rabi.	Total.					
1		2	3	4	5	6	7	8	9	10	11	12	
		Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
Sukkur Canals.	Kharif Land (Fuleli)	Desert Canal	41,445	1,308	42,748	4,222	41,446	1,308	42,749	..	45,971	27,623	19,218
		Begari Canal	20,521	475	20,996	8,536	20,523	475	20,998	..	29,534	25,147	4,387
			61,966	1,778	63,744	12,758	61,969	1,778	63,747	..	75,505	52,770	23,735
	Begari Canals.	Desert Canal	503	..	503	..	157	..	157	..	157	150	7
		Unharwah	..	202	4,819	..	2,151	131	2,282	..	2,727	2,495	232
		Begari	..	..	..	..	..	..	..	..	..	..	..
		Kashmor Bund	..	..	..	..	..	..	..	..	..	..	..
		Canals in Rohri	3,642	3,517	7,159	1,260	1,468	1,331	2,799	..	4,065	2,819	1,246
		Bunds in Rohri	..	..	..	..	..	..	..	..	..	..	..
		Sind Canal	4,389	400	4,789	2,294	2,404	188	2,592	..	4,888	2,587	2,299
Sukkur-Begari Bund	..	..	..	..	..	..	..	..	..	..	..		
Other Canals.	Sukkur Canals	1,322	323	1,645	905	823	178	1,001	..	1,006	1,201	703	
	Ghâr	7,145	12,973	20,118	1,130	2,550	2,655	5,211	..	6,331	6,282	39	
	Ghâr Bunds	..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	
Western Nara.	Nara	9,106	12,268	21,394	2,433	3,799	3,727	7,526	..	9,959	6,435	1,524	
	Pritchard Canal	..	..	..	..	..	..	..	..	..	..	..	
	Wahur	..	..	..	..	..	..	..	..	..	..	..	
	Narvi	..	..	..	..	..	..	..	..	..	..	..	
	Phitta	815	..	815	33	504	..	504	..	542	99	443	
	Daddi Canals	338	..	338	20	130	..	130	..	160	130	14	
	Nara Bunds	..	..	..	..	..	..	..	..	..	..	..	
Eastern Nara.	Nara Supply Channel	5	3,154	3,159	..	2	1,183	1,185	..	1,185	1,183	2	
	Eastern Nara	..	..	..	..	..	..	..	..	..	..	..	
	Mithrau Canal	..	..	..	..	..	..	..	..	..	..	..	
	Dimwah	..	..	..	..	..	..	..	..	..	..	..	
	Horanwah	..	..	..	..	..	..	..	..	..	..	..	
	Kipra Canal	..	..	..	..	..	..	..	..	..	..	..	
	Thar Canal	1,732	39	1,761	1,307	687	14	901	..	2,103	2,093	15	
Hyderabad Canals.	Jagîr lands in Sind.	Mehrabwah	135	30	215	..	1	1	2	..	2	2	..
		Nasrat	464	175	639	..	170	43	213	..	213	203	10
		Nadlakvi	1,717	263	1,980	11	540	38	578	..	589	510	79
		Dangro	1,292	24	1,320	..	447	..	447	..	447	449	2
		Dudwah	6,339	6,143	12,482	-15	1,904	87	1,991	..	1,974	1,970	6
		Benwah	165	..	165	..	41	..	41	..	41	42	-1
		Abibhar Kacheri	1,269	1,269	2,538	2	392	..	392	..	394	389	14
		Marak	6,020	1,714	7,734	207	2,386	36	2,421	..	2,621	2,477	224
		Ghagro Mahmuda	13,763	530	14,293	-462	4,474	132	4,606	..	4,414	3,553	591
		Kari Shumali	8,784	123	8,909	713	2,891	18	2,909	..	3,622	2,406	1,216
		Nasirwah	2,739	49	2,820	-215	802	17	819	..	704	537	147
		Sarfarwah	5,096	139	5,235	-39	1,650	49	1,699	..	1,640	992	648
		Other canals	1,205	340	1,555	22	434	89	523	..	545	540	5
Fuleli Canals.	Fuleli	49,879	5,352	55,231	3,244	21,937	1,868	23,805	..	27,049	22,336	4,213	
	Other canals	900	865	1,765	13	367	327	694	..	706	584	122	
	Karachi Canals.	Canals north of Kotri	633	487	1,120	219	224	163	387	..	606	384	222
		Kalri	345	13	358	144	368	4	372	..	316	290	116
		Bachar	1,421	935	2,356	111	536	320	906	..	1,017	659	758
		Uchita	..	..	..	..	..	..	..	..	..	..	..
		Canals in Tatta, &c.	1,632	135	1,767	347	445	45	490	..	837	717	120
		Shal Canal	1,727	..	1,727	67	696	39	735	..	802	765	37
		Phingri	1,823	155	1,978	..	..	..	..	..	..	..	..
		Canals in Mirpur Batore	207	127	334	2	87	70	157	..	159	32	127
Canals in Sujawal		237	..	237	..	102	..	102	..	102	42	60	
Satta		39	..	39	..	17	..	17	..	17	15	2	
Begari Canals.	Canals in Jati	131	..	131	22	62	..	62	..	84	82	2	
	Kotawar	..	..	..	..	..	..	..	..	..	..	..	
	Canals in Shadabandar	276	..	276	..	126	..	126	..	126	70	56	
	Bunds, left bank	319	..	319	87	149	..	149	..	282	185	51	
	Bunds, right bank	994	5	999	122	466	2	468	..	530	497	83	
		..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	
	203,241	44,975	248,316	27,127	1,18,506	14,538	1,33,044	..	1,60,171	1,20,991	39,160		

Nors.—The figures in this statement are based on assessment with the exception of those in column 12, which are actuals.

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TABLE IV.

Revenue Expenditure on new Works, Maintenance and Repairs and Revenue Collection Charges in the Revenue Department for 1890-91.

Canals and Districts.		REVENUE EXPENDITURE.							TOTAL REVENUE EXPENDITURE.			
		Improvements.			Maintenance and Repairs.			Revenue Collection Charges.	Total Columns 5 to 8.	Establishment.		
		Works.	Establishment, Tools and Plant.	Total.	Works.	Establishment, Tools and Plant.	Total.			Works.	Public Works Department.	Revenue Department.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
REGULATED CANALS DISTRICT.												
Desert Canal ...	...	...	...	28,294	7,706	36,000	15,344	51,344	28,294	7,706	15,344	51,344
Unharwah ...	...	...	...	8,851	2,429	11,280	4,444	15,724	8,851	2,429	4,444	15,724
Begari Canal ...	14,999	4,032	19,031	31,977	8,597	40,574	21,767	62,341	46,976	12,629	21,767	81,372
Kashnour Bund ...	73,567	20,986	94,553	24,928	7,111	32,039	8,781	32,870	98,495	28,097	831	1,27,423
UNREGULATED CANALS DISTRICT.												
Canals in Rohri Bunde in Rohri ...	2,051	611	2,662	37,842	11,282	49,125	18,024	67,149	38,894	11,893	18,024	69,811
Sind Canal ...	...	...	...	3,351	1,600	4,951	...	4,331	3,351	1,600	...	4,351
Sukkur-Begari Bund ...	9,999	2,475	12,474	18,817	4,655	23,472	...	36,350	13,264	4,551	16,535	36,350
Sukkur Canal ...	...	...	...	19,455	4,017	23,472	13,965	37,437	19,455	4,017	13,965	37,437
Ghar ...	274	55	329	91,357	18,436	1,09,793	58,872	1,68,665	91,631	18,491	58,872	1,68,994
Ghar Bunde ...	29,002	7,276	36,278	13,332	3,344	16,676	...	16,676	42,334	10,620	...	35,946
WESTERN NARA DISTRICT.												
Nara ...	...	...	...	47,943	6,386	54,329	53,291	1,07,620	47,943	6,386	53,291	1,07,620
Pritchard Canal ...	1,78,549	23,782	2,02,331	13,603	2,078	17,681	655	18,316	1,94,132	23,800	635	2,20,447
Waher ...	...	...	...	2,355	314	2,669	1,529	4,198	2,355	314	1,529	4,198
Marvi ...	...	...	...	1,859	247	2,106	1,247	3,353	1,859	247	1,247	3,353
Phitta ...	...	...	...	3,641	485	4,126	1,607	5,733	3,641	485	1,607	5,733
Dadu Canals ...	5,622	749	6,371	4,121	540	4,670	1,957	6,627	9,743	1,298	1,957	12,995
Nara Bunde ...	1,146	293	1,439	8,615	2,195	10,810	...	10,810	9,761	2,488	...	12,249
EASTERN NARA DISTRICT.												
Nara Supply Channel ...	...	...	...	1,871	737	2,608	1,773	4,381	1,871	737	1,773	4,381
Eastern Nara ...	4,397	1,692	5,889	16,797	6,580	23,287	7,053	30,790	21,094	8,272	7,733	36,950
Mithran Canal ...	2,128	838	2,966	30,124	11,864	41,988	23,401	65,389	32,252	12,702	23,401	68,355
Dinwah ...	...	...	...	2,001	788	2,789	1,323	4,112	2,001	788	1,323	4,112
Heranwah ...	...	...	...	71	25	96	465	364	71	25	465	564
Kipra Canal ...	...	...	...	1,299	476	1,685	1,477	3,162	1,299	476	1,477	3,162
Thar Canal ...	...	...	...	8,849	3,465	12,314	8,795	21,059	8,849	3,465	8,795	21,039
HYDERABAD CANALS DISTRICT.												
Mohrabwah ...	...	...	...	9,141	1,921	11,062	2,404	13,466	9,141	1,921	2,404	13,466
Nasrat ...	...	...	...	11,452	2,662	14,114	5,556	19,700	11,452	2,662	5,556	19,700
Nasolaki ...	65	15	80	24,552	5,692	30,244	10,867	41,111	24,617	5,707	10,867	41,191
Dambro ...	...	...	...	6,839	1,585	8,424	2,336	10,760	6,839	1,585	2,336	10,760
Dadiwah ...	...	...	...	11,464	2,657	14,121	5,796	19,827	11,464	2,657	5,796	19,827
Renwah ...	16,621	3,714	19,735	8,280	1,919	10,199	3,189	13,379	24,301	5,632	3,189	23,114
Alibhar Kacheri ...	...	...	...	3,723	753	4,476	835	5,341	3,723	753	835	5,341
Marak ...	...	...	...	29,456	6,280	35,736	5,927	41,663	29,456	6,280	5,927	41,663
Gharo Mahumda ...	...	...	...	27,827	6,451	34,278	12,229	46,507	27,827	6,451	12,229	46,507
Kari Shumali ...	...	...	...	12,392	2,866	15,258	7,263	22,491	12,392	2,866	7,263	22,491
Nasirwah ...	...	...	...	12,704	2,945	15,649	6,315	21,964	12,704	2,945	6,315	21,964
Sarfarwah ...	...	...	...	16,203	3,407	19,610	2,919	22,529	16,203	3,407	2,919	22,529
Other canals ...	...	...	...	14,702	3,408	18,110	5,859	23,969	14,702	3,408	5,859	23,969
FEUCHI CANALS DISTRICT.												
Fuleli ...	...	...	...	1,72,234	32,450	2,04,684	48,233	2,52,917	1,72,234	32,450	48,233	2,52,917
Other canals ...	1,666	314	1,980	24,126	4,554	28,680	4,631	33,311	25,792	4,868	4,631	35,291
KARACHI CANALS DISTRICT.												
Canals north of Kotri ...	...	...	...	3,266	1,186	4,452	1,757	6,209	3,266	1,186	1,757	6,209
Kotri ...	...	...	...	12,942	4,890	17,832	2,658	20,299	12,942	4,890	2,658	20,299
Boghar ...	443	161	604	13,228	4,805	18,033	5,822	23,556	13,671	4,966	5,822	24,160
Uchitta ...	...	...	...	424	154	578	2,470	3,048	424	154	2,470	2,948
Canals in Tatta, &c. ...	...	...	...	6,789	2,465	9,254	2,104	11,358	6,789	2,465	2,104	11,358
Shai Canals ...	...	...	...	2,274	826	3,100	345	3,445	2,274	826	345	3,445
Pinyari ...	280	102	382	42,659	15,439	58,148	16,237	74,385	42,659	15,439	16,237	74,767
Canals in Mirpur Batoro ...	...	...	...	6,173	2,241	8,414	3,758	12,172	6,173	2,241	3,758	12,172
Canals in Sujawal ...	...	...	...	3,703	1,344	5,047	1,534	6,581	3,703	1,344	1,534	6,581
Satta ...	...	...	...	2,929	1,063	3,992	1,628	5,620	2,929	1,063	1,628	5,620
Canals in Jati ...	...	...	...	193	70	263	441	704	193	70	441	704
Rhutta ...	...	...	...	4,128	1,499	5,627	947	6,574	4,128	1,499	947	6,574
Kokawar ...	...	...	...	2,935	1,066	4,001	2,936	6,931	2,935	1,066	2,936	6,931
Canals in Shahbandar ...	...	...	...	576	209	785	466	1,251	576	209	466	1,251
Bunde, left bank ...	5,057	1,836	6,892	32,577	11,829	44,406	40	44,436	37,634	13,664	50	51,248
Bunde, right bank ...	7,454	2,706	10,160	18,956	6,894	25,850	18	25,868	26,440	9,690	18	36,058
Begari Canals District.												
Begari Canals ...	88,566	25,018	1,13,584	94,050	25,843	1,19,893	42,386	1,62,279	1,19,893	42,386	1,19,893	2,75,865
Shikarpur Canals ...	12,050	3,086	15,136	75,275	21,488	96,763	34,539	1,31,322	12,050	3,086	34,539	1,46,438
Ghar Canals ...	29,276	7,331	36,607	1,24,144	25,797	1,49,941	72,837	2,22,778	1,55,429	44,827	72,837	2,59,255
Western Nara ...	1,83,317	24,824	2,10,141	84,137	18,254	96,391	60,266	1,56,657	3,69,434	53,125	96,391	3,66,748
Eastern Nara ...	6,425	2,430	8,855	60,832	26,858	84,790	44,827	1,29,617	67,257	26,458	44,827	1,38,522
Hyderabad Canals ...	16,086	3,729	19,815	1,88,735	42,576	2,31,311	71,396	3,02,707	2,04,821	46,305	71,396	3,22,522
Fuleli Canals ...	1,666	314	1,980	18,038	5,732	23,770	52,864	2,86,228	1,98,026	37,318	52,864	2,88,208
Karachi Canals ...	13,234	4,804	18,038	1,53,732	35,839	2,09,621	42,866	2,52,487	1,67,016	60,643	42,866	2,70,525
Total	3,52,620	71,636	4,24,256	9,77,315	2,44,759	12,22,074	4,22,001	16,44,075	13,29,935	3,16,395	4,22,001	20,68,331

Note.—Column includes Tools and Plant.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE V.

Cultivation, Canal Revenue and Expenditure for 1890-91 as contrasted with three previous years.

Canals and Executive Districts.	AVERAGE OF THREE PREVIOUS YEARS.			Percentage of Expenditure on Revenue.	Cost of Maintenance per Acre.	1890-91.			Percentage of Expenditure on Revenue.	Cost of Maintenance per Acre.	LENGTH IN MILES OF	
	Cultivation.	Canal Revenue.	Maintenance and Revenue collection.			Cultivation.	Canal Revenue.	Maintenance and Revenue collection.			Canal.	Bund.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Acre.	Rs.	Rs.			Acre.	Rs.	Rs.				
GHAR SHIKARPOUR, BEGARI CANALS.												
Desert Canal ...	109,762	1,73,809	48,606	27-96	0-4	121,919	1,74,946	51,344	29-35	0-5	190	...
Unharwah ...	35,473	64,144	18,701	29-13	0-5	20,690	37,496	15,724	42-01	0-8	67	...
Begari Canals ...	180,932	3,12,171	92,235	29-55	...	144,053	2,61,766	62,341	23-88	0-5	176	...
Kashmir Bund ...	4,276	8,001	42,884	...	...	4,559	8,734	32,870	...	...	...	48
GHAR SHIKARPOUR, GHAR CANALS.												
Canals in Rohri ...	81,672	1,94,259	70,088	36-08	0-9	66,762	1,66,871	67,149	40-24	0-10	240	...
Bunds in Rohri ...	...	12	2,908	...	...	...	30	4,351	...	...	...	54
Sind Canal ...	59,019	1,55,226	42,912	27-60	0-7	66,527	1,79,323	36,350	20-27	0-5	98	...
Sukkur-Begari Bund ...	...	824	35,069	...	...	...	384	23,472	...	...	...	36
GHAR SHIKARPOUR, GHAR CANALS.												
Sukkur Canal ...	82,166	1,93,121	42,614	22-07	0-5	87,199	2,13,964	37,437	17-50	0-4	127	...
Ghar ...	204,567	5,67,691	1,32,674	23-31	0-6	253,114	7,12,364	1,08,663	23-68	0-7	331	...
Ghar Bunds ...	...	186	14,690	...	...	...	213	16,676	...	...	...	43
WESTERN NARA.												
Nara ...	214,018	5,50,938	1,27,892	23-21	0-6	207,373	5,50,666	1,07,620	19-54	0-5	350	...
Pritchard Canal ...	...	...	...	...	...	...	3,027	18,316	...	...	...	25
Wahur ...	6,471	16,089	3,869	24-05	0-6	6,186	15,305	4,198	27-43	0-7	23	...
Marvi ...	3,976	11,846	2,136	18-01	0-6	4,134	12,276	3,353	27-31	0-8	15	...
Phitta ...	5,765	10,614	4,827	45-47	0-8	7,806	16,149	5,733	35-47	0-7	27	...
Dadu Canals ...	...	...	...	...	...	11,078	19,556	6,627	33-99	0-6	14	...
Nara Bunds ...	...	...	...	...	...	...	82	10,510	...	...	...	80
EASTERN NARA.												
Nara Supply Channel ...	5,369	15,105	3,938	26-07	0-7	9,202	21,746	4,381	20-15	0-5	12	...
Eastern Nara ...	49,720	74,793	21,529	28-78	0-4	50,081	70,184	30,970	39-11	0-6	20	102
Mithran Canal ...	116,334	2,28,093	61,689	28-40	0-5	119,566	2,34,955	65,889	27-83	0-6	155	93
Dinwah ...	5,016	8,813	1,694	19-22	0-3	7,732	13,236	4,112	31-07	0-6	28	...
Heranwah ...	2,173	3,788	457	12-06	0-2	2,940	4,651	564	12-2	0-2	3	...
Kipra Canal ...	2,041	2,557	513	20-06	0-3	9,273	14,959	3,162	21-10	0-2	10	...
Thar Canal ...	43,912	80,246	24,045	29-99	0-6	39,548	87,553	21,039	24-03	0-6	65	33
HYDERABAD CANALS.												
Mehrabwah ...	14,036	23,155	16,569	65-87	1-2	13,225	24,107	13,466	50-58	1-02	59	...
Nasrat ...	23,357	52,893	22,432	42-45	0-10	24,103	56,057	19,700	35-14	0-8	66	...
Naolaki ...	53,632	1,47,731	32,874	22-25	0-6	50,482	1,08,984	41,111	37-73	0-8	137	...
Dambro ...	9,013	13,410	10,015	54-4	1-11	12,659	23,613	10,760	45-57	0-9	56	...
Dadwah ...	30,316	53,565	26,376	49-24	0-9	32,755	57,694	19,327	34-47	0-6	105	...
Renwah ...	14,440	28,028	22,849	81-52	1-6	17,142	32,060	13,379	41-07	0-8	134	...
Alibhar Kacheri ...	7,902	14,753	8,925	60-50	1-13	9,325	16,788	5,341	31-81	0-6	56	...
Marak ...	46,785	91,854	23,301	25-01	0-5	49,421	95,531	41,663	43-61	0-8	187	1
Ghairo Mahmuda ...	62,661	1,05,496	40,334	38-23	0-6	71,755	1,22,821	46,507	37-87	0-6	291	...
Kari Shumali ...	41,678	50,169	20,388	40-64	0-5	42,668	73,445	22,491	30-62	0-5	214	...
Nasirwah ...	29,835	50,887	21,783	42-81	0-7	32,088	63,397	21,964	34-65	0-7	130	...
Sarfrawah ...	24,714	33,009	17,680	50-37	0-7	27,814	40,679	22,529	55-38	0-8	116	...
Other canals ...	26,179	52,237	23,548	45-08	0-9	28,127	58,998	23,969	40-63	0-9	112	...
FULELI CANALS.												
Fuleli ...	295,637	5,46,472	2,57,966	47-20	0-9	3,32,765	6,16,684	2,52,917	41-01	0-8	997	...
Other canals ...	22,761	47,096	26,784	56-87	1-12	20,314	46,606	33,311	71-42	1-6	146	12
KARACHI CANALS.												
Canals north of Kotri ...	17,659	31,300	14,163	45-25	0-8	8,463	17,722	8,209	35-04	0-7	44	...
Kalri ...	10,686	23,254	18,485	79-49	1-7	12,138	26,819	20,299	75-73	1-7	136	...
Baghar ...	20,952	39,794	20,555	51-65	0-10	26,063	53,085	23,556	44-37	0-9	108	...
Uchita ...	10,269	21,611	2,643	12-23	0-3	12,016	24,244	3,048	12-57	0-3	44	...
Canals in Tatta, &c. ...	11,305	18,118	10,514	58-03	0-9	12,199	21,011	11,355	54-06	0-9	83	...
Shal Canal ...	2,596	7,038	3,210	45-58	1-2	3,143	3,578	3,445	96-28	1-1	18	...
Pinyari ...	71,506	1,68,097	56,852	33-82	0-8	70,226	1,66,315	74,385	44-73	1-06	328	...
Canals in Mirpur Batoro ...	14,162	32,472	13,014	40-08	0-9	16,168	39,119	12,172	31-10	0-8	81	...
Canals in Sujawal ...	7,173	15,248	4,255	27-90	0-6	7,655	15,368	6,581	42-17	0-9	35	...
Satta ...	9,310	15,191	8,076	47-69	0-9	10,543	16,713	5,620	33-63	0-5	58	...
Kokowari ...	2,265	5,339	2,224	41-64	0-10	2,503	4,759	794	14-71	0-3	11	...
Canals in Jati ...	5,044	11,949	10,381	86-80	2-6	5,546	9,304	6,574	70-67	1-2	59	...
Khanra ...	10,869	24,904	6,445	25-28	0-8	13,427	29,274	6,931	23-63	0-5	100	...
Canals in Shahbandar ...	1,709	3,855	4,583	118-88	2-7	2,303	4,534	1,251	27-59	0-5	7	...
Bunds, left bank ...	294	187	33,189	...	...	319	185	44,456	...	...	...	65
Bunds, right bank ...	358	228	33,522	...	...	990	497	25,898	...	...	...	86
Begari Canals District	330,443	5,58,125	2,00,626	35-95	0-7	294,221	4,82,872	1,62,279	33-60	0-7	433	48
Shikarpur Canals ...	140,691	3,50,321	1,50,977	43-09	1-1	133,289	3,46,608	1,31,322	37-89	0-1	338	90
Ghar Canals ...	236,733	7,60,998	1,89,978	24-96	0-7	340,313	9,26,541	2,22,778	24-04	0-7	508	43
Western Nara ...	230,230	5,89,487	1,88,724	23-53	0-6	236,604	6,21,981	1,56,637	25-19	0-7	454	80
Eastern Nara ...	224,365	4,13,340	1,13,265	27-40	0-5	228,292	4,56,314	1,29,617	28-40	0-8	293	258
Hyderabad Canal ...	384,828	7,26,277	2,54,931	39-23	0-7	410,964	7,74,174	2,68,228	33-15	0-7	1,693	1
Fuleli Canals ...	818,418	5,93,568	2,54,750	47-97	0-9	553,079	6,63,390	2,52,487	43-15	1-2	1,143	12
Karachi Canals ...	196,158	4,21,555	2,44,711	58-04	1-3	203,711	4,32,527	2,52,487	58-39	1-2	1,112	151
Total	2,111,766	44,13,701	16,07,962	36-43	0-8	2,203,473	47,04,507	16,44,075	34-93	0-75	5,944	653

Agricultural Receipts ...

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47,04,310

H. M. THOMPSON, M.Inst.C.E.,
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TABLE VI.
Direct and Indirect Receipts of Canal Revenue for 1890-91.

Canals and Executive District.		Water share of net consolidated Revenue as in Table VII.	Deduct average before improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakāba and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1		2	3	4	5	6	7
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begāri Canals	Desert Canal...	1,46,916	.....	1,46,916	28,030	955	1,75,901
	Unarwāh ...	37,399	.....	37,399	27	1,263	38,689
	Begāri Canal...	2,33,411	24,856	2,08,555	28,355	4,007	2,40,917
	Kashmor Bund ...	8,287	.....	8,287	447	220	8,954
Shikārpur Canals	Canals in Rohri ...	1,62,627	.....	1,62,627	4,244	1,076	1,67,947
	Bunds in Rohri ...	.....	.....	.....	30	.....	30
	Sind Canal ...	1,76,366	.....	1,76,366	2,957	399	1,79,722
	Sukkur-Begāri Bunds ...	.....	71,550	.....	384	.....	384
Ghār Canals	Sukkur Canal ...	2,11,611	1,16,532	1,40,064	2,353	359	1,42,773
	Ghār ...	7,00,434	.....	5,83,602	11,930	1,111	5,96,643
	Ghār Bunds ...	.....	.....	.....	213	.....	213
Western Nara	Nāra ...	5,32,157	.....	5,32,157	18,599	.....	5,50,666
	Pritchard Canal ...	7,790	.....	7,790	157	769	8,716
	Wāhur ...	15,286	.....	15,286	19	3	15,308
	Marvi ...	11,367	.....	11,367	909	122	12,398
	Phitta ...	15,753	.....	15,753	190	183	16,124
	Dādū Canals ...	19,416	.....	19,416	140	105	19,661
	Nāra Bunds ...	.....	.....	.....	82	.....	82
	Nāra Supply Channel ...	15,143	.....	15,143	6,603	9	21,755
	Eastern Nāra ...	67,786	3,444	64,342	11,388	.....	75,740
	Mithra Canal ...	2,33,543	.....	2,33,543	1,442	21	2,35,006
Eastern Nāra	Dimwāh ...	12,232	.....	12,232	4	12	13,248
	Horanwāh ...	4,651	.....	4,651	.....	.....	4,651
	Kipra Canal ...	14,954	.....	14,954	5	.....	14,959
	Thar Canal ...	84,946	.....	84,946	2,697	.....	87,553
	Mohrabwāh ...	24,043	.....	24,043	64	251	24,358
Hyderabad Canals	Nasrat ...	55,356	.....	55,356	791	224	56,281
	Naolakhī ...	1,08,164	.....	1,08,164	820	239	1,09,223
	Dambro ...	22,909	.....	22,909	704	129	23,742
	Dad ...	55,092	.....	55,092	2,602	205	57,899
	Renwāh ...	31,761	.....	31,761	299	119	32,179
	Alibhar Kachori ...	16,396	8,427	7,969	392	117	8,478
	Mārak ...	92,970	36,459	56,511	2,561	396	59,378
	Ghāro Mahmuda ...	1,18,744	.....	1,18,744	4,077	201	1,23,022
	Kari Shumali ...	70,704	.....	70,704	2,741	350	73,795
	Nasirwāh ...	62,599	.....	62,599	798	129	63,526
	Sarfrāzwāh ...	39,361	11,155	28,196	1,328	316	29,840
	Other canals ...	58,046	.....	58,046	952	152	59,150
Fuleli Canals	Fuleli Canals ...	5,90,018	1,30,284	4,59,734	26,606	1,075	4,87,475
	Other canals ...	45,687	.....	45,687	919	13	46,619
Karāchi Canals	Canals north of Kotri	17,177	.....	17,177	545	142	17,864
	Kalri ...	26,271	.....	26,271	548	12	26,831
	Baghar ...	52,593	.....	52,593	492	20	53,105
	Uchita ...	23,627	.....	23,627	617	28	24,272
	Canals in Tatta, &c.	19,965	.....	19,965	1,946	7	21,018
	Shal Canal ...	3,563	.....	3,563	15	.....	3,578
	Yūyārī ...	1,61,827	.....	1,61,827	4,838	282	1,66,977
	Canals in Mīspur Bātoro	39,074	.....	39,074	45	79	39,197
	Canals in Sujāwāl ...	15,313	.....	15,313	55	44	15,412
	Satta ...	16,657	.....	16,657	56	4	16,717
	Canals in Jātī ...	4,739	.....	4,739	120	6	4,765
	Khanta ...	9,174	.....	9,174	130	1	9,305
	Kokawārī ...	28,461	.....	28,461	813	10	29,284
	Canals in Shāhbāndar	4,459	.....	4,459	75	2	4,536
	Bunds, left bank ...	.....	.....	.....	185	.....	185
	Bunds, right bank ...	.....	.....	.....	497	.....	497
Begāri Canals	...	4,96,013	24,856	4,01,157	56,859	6,445	4,64,461
	...	3,38,998	.....	3,38,998	7,615	1,475	3,48,083
Ghār Canals	...	9,12,045	1,88,382	7,23,663	14,496	1,470	7,39,629
	...	6,01,769	.....	6,01,769	20,212	1,192	6,23,173
Western Nāra Canals	...	4,34,255	3,444	4,30,811	22,669	42	4,52,912
	...	7,56,135	56,041	7,00,094	18,039	2,738	7,20,871
Hyderabad Canals	...	6,35,705	1,30,284	5,05,421	27,585	1,088	5,34,094
	...	4,22,900	.....	4,22,900	9,627	616	4,33,143
Karāchi Canals	...	45,27,815	4,03,007	41,24,808	1,76,492	15,066	43,16,366
	Total	45,27,815	4,03,007	41,24,808	1,76,492	15,066	43,16,366
Adj.—Agricultural Receipts ...					8	.....	3
Total ...					1,76,495	15,066	43,16,369

NOTE.—The figures in this statement, with the exception of Hakāba, Miscellaneous and Occupancy fees, all of which are actuals, are based on assessments.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VI-A.

Actual Direct and Indirect Receipts of Canal Revenue in 1890-91 as shown in General Revenue Accounts of Executive Districts prepared by Examiner, Public Works Accounts.

Canals and Executive Districts.		Water share of net consolidated Revenue collected.	Deduct average before improvement.	Balance Irrigation share due to Canals.	Direct Receipts, Hakdats and Miscellaneous.	Receipts from Sales of Occupancy-rights.	Total Direct and Indirect Receipts.
1		2	3	4	5	6	7
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begāri Canals	Desert Canal	1,41,770	.....	1,41,770	28,080	955	1,70,755
	Unharwāh	44,439	.....	44,439	27	1,263	45,729
	Begāri Canals	2,30,931	24,856	2,06,075	28,355	4,007	2,38,437
	Kashmor Bund	8,308	.....	8,308	447	220	8,975
Shikārpur Canals	Canals in Rohri	1,62,696	.....	1,62,696	4,244	1,076	1,68,016
	Bunds in Rohri	.....	.....	.....	30	.....	30
	Sind Canal	1,77,349	.....	1,77,349	2,957	399	1,80,705
	Sukkur-Begāri Bunda	.....	.....	.....	384	.....	384
Ghār Canals	Sukkur Canal	2,09,924	71,550	1,38,374	2,353	359	1,41,066
	Ghār	6,96,636	1,16,832	5,79,804	11,930	1,111	5,92,845
	Ghār Bunds	.....	.....	.....	213	.....	213
Western Nāra	Nāra	5,17,388	.....	5,17,388	18,509	.....	5,35,897
	Richard Canal	6,349	.....	6,349	137	769	7,255
	Wānur	15,286	.....	15,286	19	3	15,308
	Marvi	11,633	.....	11,633	909	122	12,664
	Phitta	15,753	.....	15,753	396	193	16,342
	Dādā Canals	19,431	.....	19,431	140	105	19,676
	Nāra Bunds	.....	.....	.....	82	.....	82
Eastern Nāra	Nāra Supply Channel	16,549	.....	16,549	6,603	9	23,161
	Eastern Nāra	68,970	3,444	65,526	11,398	.....	76,924
	Mithra Canal	2,34,005	.....	2,34,005	1,412	21	2,35,468
	Dinwāh	13,232	.....	13,232	4	12	13,248
	Hiranwāh	4,651	.....	4,651	.....	.....	4,651
	Kipra Canal	14,772	.....	14,772	5	.....	14,777
	Thar Canal	84,953	.....	84,953	26,07	.....	87,560
Hyderabad Canals	Mehrabwāh	24,042	.....	24,042	64	251	24,357
	Nasrat	55,356	.....	55,356	701	224	56,281
	Naoiakhi	1,08,164	.....	1,08,164	820	239	1,09,223
	Dambro	22,909	.....	22,909	704	129	23,742
	Dad	55,092	.....	55,092	2,602	205	57,899
	Kenwāh	31,761	.....	31,761	299	119	32,179
	Alibhar Kaoheri	16,396	8,427	7,969	392	317	8,478
	Murak	92,970	36,159	56,811	2,561	.....	59,373
	Ghāro Mahmuda	1,18,742	.....	1,18,742	4,677	.....	1,23,020
	Kari Shumali	70,220	.....	70,220	2,741	350	73,311
	Nasirwāh	62,598	.....	62,598	798	129	63,525
	Sarfrāzwāh	39,351	11,155	28,196	1,228	316	29,840
Fuleli Canals	Other canals	58,046	.....	58,046	952	152	59,150
	Fuleli	5,89,782	1,30,284	4,59,498	26,666	1,075	4,87,239
Karāchi Canals	Other canals	45,696	.....	45,696	919	13	46,628
	Canals north of Kotri	17,177	.....	17,177	545	142	17,864
	Kalri	20,102	.....	20,102	548	12	20,662
	Paghar	54,856	.....	54,856	402	20	55,368
	Uchita	24,088	.....	24,088	617	28	24,733
	Canals in Tatta, &c.	20,132	.....	20,132	1,046	7	21,185
	Shal Canals	3,452	.....	3,452	15	.....	3,467
	Pinyāri	1,60,233	.....	1,60,233	4,488	262	1,64,983
	Canals in Mirpur Batoro	37,586	.....	37,586	45	78	37,709
	Canals in Sujāwal	15,313	.....	15,313	55	44	15,412
	Tatta	16,243	.....	16,243	56	4	16,303
	Canals in Jati	3,399	.....	3,399	20	6	3,425
Hyderabad Canals	Khanta	9,388	.....	9,388	130	1	9,519
	Kokowari	28,489	.....	28,489	813	10	29,312
	Canals in Shāhbandar	4,593	.....	4,593	75	2	4,670
	Bunds, left bank	.....	.....	.....	185	.....	185
	Bunds, right bank	.....	.....	.....	497	.....	497
	Begāri Canals	4,25,448	24,856	4,00,592	56,859	6,445	4,63,906
	Shikārpur Canals	3,40,045	.....	3,40,045	7,615	1,475	3,49,135
Fuleli Canals	Ghār Canals	9,06,560	1,88,382	7,18,178	14,496	1,470	7,34,144
	Western Nāra	5,85,840	.....	5,85,840	20,212	1,192	6,07,244
Hyderabad Canals	Eastern Nāra	4,37,132	3,444	4,33,688	22,059	42	4,55,789
	Hyderabad Canals	7,55,647	56,041	6,99,606	18,039	2,738	7,20,383
Karāchi Canals	Fuleli Canals	6,35,478	1,30,284	5,05,194	27,385	1,088	5,33,567
	Karāchi Canals	4,22,051	.....	4,22,051	9,627	616	4,32,291
Total		43,08,201	4,03,007	41,05,194	1,76,492	15,066	42,96,752
Add—Agricultural Receipts					3	.....	3
Total					1,76,495	15,066	42,96,755

NOTE.—The figures in this statement are based on actual realizations.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VII.

Area of Cultivation and consolidated Revenue for 1890-91.

Canals and Districts.	CULTIVATION.			CONSOLIDATED REVENUE.			REMISSESIONS.			Net Consolidated Revenue.	Land share 10 per cent.	Water share 90 per cent.	
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.				
	1	2	3	4	5	6	7	8	9				10	11	12	13
	Acrea.	Acrea.	Acrea.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begri Canals.	Desert Canal ..	77,894	4,679	81,668	1,55,261	7,587	1,63,268	29	..	29	1,63,289	16,323	1,46,916
	Unharwah ..	17,966	2,820	20,690	35,839	6,013	41,852	290	58	318	41,554	4,155	37,399
	Begri Canal ..	102,639	15,674	118,323	2,21,860	44,539	2,66,399	3,379	3,674	7,053	2,59,346	25,935	2,33,411
	Kashmer Bund ..	1,330	3,229	4,559	2,661	6,350	9,011	..	364	364	9,207	920	8,287
Shikampur Canals.	Canals in Rohri ..	43,235	16,345	59,603	1,32,031	49,215	1,81,246	547	..	547	1,80,699	18,072	1,62,627
	Sind Canal ..	50,167	11,571	61,738	1,37,997	28,334	1,96,331	..	369	369	1,95,962	19,596	1,76,366
	Sukkur-Begri Bund ..	..	..	..	..	..	..	..	..	..	..	..	..
Ghaz Canals.	Sukkur Canal ..	58,140	27,214	85,354	1,56,465	78,598	2,35,063	3	830	833	2,35,125	23,514	2,11,611
	Ghaz ..	179,967	45,424	225,396	6,06,888	1,73,333	7,79,921	1,576	85	1,661	7,78,260	77,826	7,00,434
	Ghaz Bunds ..	..	..	..	..	..	..	..	..	..	..	..	..
Western Nagra.	Nagra ..	132,500	63,470	195,970	4,34,829	1,54,457	5,91,286	..	..	..	5,91,286	59,129	5,32,157
	Pritichari Canal ..	1,682	1,145	3,027	5,316	3,283	8,599	27	16	43	8,566	866	7,700
	Wahur ..	4,428	1,709	6,136	12,564	4,872	17,436	419	33	452	16,984	1,698	15,286
	Marvi ..	2,405	1,729	4,134	6,371	6,428	12,799	..	68	68	12,631	1,264	11,367
	Phatta ..	6,109	1,859	7,968	11,458	6,943	17,403	..	..	..	17,403	1,750	15,733
	Dadu Canals ..	7,979	2,761	10,740	15,815	5,759	21,574	..	..	..	21,574	2,158	19,416
	Nagra Bunds ..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Nagra.	Nagra Supply Channel ..	106	5,995	6,043	596	16,220	16,825	..	..	..	16,825	1,682	15,143
	Eastern Nagra ..	13,504	36,567	50,061	23,103	53,429	76,532	1,029	180	1,215	75,317	7,531	67,786
	Minhas Canal ..	91,088	19,478	110,566	2,19,337	41,191	2,60,528	548	88	636	2,59,422	25,949	2,33,473
	Dinwah ..	6,739	633	7,372	13,029	738	13,767	..	..	..	13,767	1,372	12,395
	Haranwah ..	2,160	245	2,405	4,640	528	5,168	..	..	..	5,168	517	4,651
	Kipri Canal ..	7,023	2,299	9,323	13,041	3,648	16,689	73	..	73	16,616	1,662	14,954
	Thar Canal ..	34,538	5,169	39,707	87,399	6,396	93,795	..	..	..	93,795	9,379	84,416
Hyderabad Canals.	Mehrabwah ..	11,711	1,598	13,310	24,033	2,731	26,764	70	..	70	26,714	2,671	24,043
	Nasrat ..	19,556	3,596	23,152	41,749	6,528	48,277	..	..	..	48,277	4,827	43,450
	Nasolahi ..	45,600	4,896	50,496	1,09,529	16,653	1,26,182	..	..	..	1,26,182	12,618	1,13,564
	Dambro ..	9,490	1,249	10,739	22,825	2,629	25,454	..	..	..	25,454	2,545	22,909
	Dadwah ..	22,921	2,691	25,612	38,908	7,575	46,483	..	..	..	46,483	4,648	41,835
	Bemrah ..	12,692	1,314	14,006	27,981	3,867	31,848	238	..	238	31,610	3,161	28,449
	Alihar Kacheri ..	7,660	..	7,660	17,953	233	18,186	..	..	..	18,186	1,822	16,364
	Hirak ..	41,317	830	42,147	1,02,029	1,638	1,03,667	417	..	417	1,03,300	10,330	92,970
	Ghuzo Mahmuda ..	33,306	3,666	37,496	1,32,314	8,132	1,40,446	2,996	2	2,998	1,37,448	13,744	1,23,704
	Kari Bhumali ..	32,465	1,394	33,759	80,616	3,394	84,010	4,840	..	4,840	79,170	7,856	71,314
	Nasirwah ..	27,164	1,734	28,898	65,876	5,733	71,609	1,834	..	1,834	69,775	6,978	62,797
	Safarwah ..	21,141	1,443	22,584	40,509	3,901	44,410	887	..	887	43,523	4,352	39,171
	Other canals ..	21,023	6,547	27,572	49,469	13,012	62,481	35	..	35	62,446	6,249	56,196
Futeli Canals.	Futeli ..	236,441	41,090	277,536	5,74,527	82,233	6,56,760	1,192	11	1,203	6,55,557	65,559	5,90,008
	Other canals ..	16,523	2,276	18,799	44,323	7,901	52,224	..	1,661	1,661	50,563	5,076	45,487
Kotri Canals.	Canals north of Kotri ..	5,665	2,298	7,963	13,172	5,911	19,083	..	..	..	19,086	1,909	17,177
	Kalri ..	10,596	1,574	12,170	22,423	4,393	26,816	443	..	443	26,370	2,639	23,731
	Beghar ..	18,275	5,433	23,707	44,594	13,881	58,475	38	..	38	58,437	5,844	52,593
	Uchita ..	10,836	1,190	12,026	23,628	2,624	26,252	..	..	..	26,222	2,625	23,597
	Canals in Tatta, &c. ..	9,375	1,557	10,932	21,421	4,053	25,474	3,291	..	3,291	22,183	2,218	19,965
	Ehal Canals ..	2,496	637	3,133	7,217	1,332	8,549	4,690	..	4,690	3,859	386	3,473
	Pinyari ..	63,990	2,548	66,538	1,66,783	7,154	1,93,937	15,558	..	15,558	1,79,386	17,981	1,61,407
Karachi Canals.	Canals in Mirpur Batore ..	13,768	2,405	16,173	39,286	5,692	44,978	1,771	..	1,771	43,207	4,320	38,887
	Canals in Sujawal ..	6,350	491	7,221	19,893	1,219	21,112	3,773	..	3,773	17,339	1,733	15,606
	Satta ..	9,448	888	10,336	21,974	1,463	23,437	5,329	..	5,329	18,108	1,811	16,297
	Canals in Jati ..	1,892	372	2,264	5,483	1,233	6,716	1,440	..	1,440	5,276	527	4,749
	Khanra ..	5,998	106	6,104	14,369	232	14,601	4,519	..	4,519	10,080	1,019	9,061
	Kokawari ..	12,770	991	13,761	32,820	1,482	34,302	2,685	..	2,685	31,613	3,162	28,451
	Canals in Shikharbandar ..	1,904	123	2,027	4,939	308	5,247	203	..	203	4,944	495	4,449
	Bunds, left bank ..	..	..	..	..	..	..	..	..	..	..	..	..
	Bunds, right bank ..	..	..	..	..	..	..	..	..	..	..	..	..
Begri Canals District ..	..	199,419	25,736	225,155	4,15,661	65,589	4,81,260	3,668	4,096	7,764	4,73,316	47,333	4,25,983
Shikampur Canals ..	..	98,425	27,916	126,341	2,90,028	87,449	3,77,477	547	369	916	3,76,561	37,668	3,38,893
Ghaz Canals ..	..	228,107	89,423	317,530	7,62,555	2,32,330	10,15,885	1,979	425	2,404	10,13,481	1,01,340	9,12,141
Western Nagra ..	..	154,310	62,747	217,057	4,88,253	1,80,044	6,68,297	..	..	..	6,68,297	66,845	6,01,452
Eastern Nagra ..	..	135,490	62,722	228,212	3,62,126	1,22,004	4,84,130	1,950	274	2,224	4,81,906	48,251	4,33,655
Hyderabad Canals ..	..	829,236	39,916	869,152	7,76,273	74,226	8,50,499	10,347	2	10,349	8,39,150	84,015	7,55,135
Futeli Canals ..	..	222,773	42,310	265,083	6,19,856	90,154	7,09,004	1,192	1,472	2,664	7,06,340	70,635	6,35,705
Karachi Canals ..	..	174,469	20,078	194,547	4,59,775	51,445	5,11,220	41,431	..	41,431	4,69,789	46,989	4,22,799
Total ..	..	1,596,239	328,218	1,924,457	41,73,819	9,24,967	50,98,736	61,100	6,685	67,845	50,30,911	5,03,096	45,27,815

NOTE.—The figures in this table are based on assessment.

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Superintending Engineer in Sind.

TABLE VII-A.

Comparative Statement showing Increases or Decreases under heads Kharif and Rabi and Irrigation share of net consolidated Assessment for 1889-90 and 1890-91.

Names of Canals and Districts.		1889-90.			1890-91.			Results.		
		Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.
		Kharif.	Rabi.		Kharif.	Rabi.		Kharif.	Rabi.	
1		2	3	4	5	6	7	8	9	10
		Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
Begari Canals.	Desert Canal ...	77,240	5,437	1,48,221	77,594	4,074	1,46,916	+254	-1,363	-1,305
	Unharwah ...	32,270	1,570	60,971	17,866	2,824	37,399	-14,404	+1,234	-22,572
	Begari Canals ...	136,150	5,383	2,75,101	102,629	15,609	2,33,411	-33,521	+10,226	-41,690
	Kashmir Band ...	2,597	2,766	9,954	1,330	3,220	8,287	-1,267	+463	-1,657
Shikarpur Canals.	Canals in Rohri... ..	58,908	13,790	1,81,952	43,258	16,345	1,62,627	-15,650	+2,555	-19,325
	Bands in Rohri... ..	...	...	...	...	...	...	...	...	...
	Sind Canal ...	56,175	7,470	1,74,210	50,167	11,071	1,76,366	-6,008	+4,101	+2,156
Ghar Canals ...	Sukkur-Begari Band ...	...	...	...	...	...	...	...	...	...
	Ghar ...	63,886	24,401	2,10,821	58,140	27,214	2,11,611	-5,746	+2,813	+790
	Ghar Bunds ...	177,041	50,514	6,42,041	179,967	53,029	7,00,434	+2,926	+2,515	+58,393
Western Nara.	Nara ...	164,011	58,072	5,74,406	132,509	53,470	5,32,157	-31,502	-4,602	-42,249
	Pritchard Canal ...	...	...	...	...	1,145	1,882	...	...	+7,790
	Mahr ...	3,713	1,014	16,789	4,426	1,760	15,286	-1,287	+746	-1,503
	Mari ...	2,991	1,147	16,713	2,405	1,729	11,367	-586	+582	+655
	Phitta ...	3,943	1,589	11,018	5,109	1,882	15,733	+1,166	+293	+4,735
	Dadu Canals ...	7,306	1,952	16,972	7,979	2,761	19,416	+673	+809	+2,444
	Nara Bunds ...	...	...	...	...	...	...	...	...	...
Eastern Nara.	Nara Supply Channel ...	409	6,314	16,442	108	5,935	15,143	-301	-379	-1,299
	Eastern Nara ...	21,540	64,554	1,08,001	13,504	36,587	67,786	-8,036	-27,967	-40,215
	Mithran Canal ...	98,629	23,542	2,40,675	91,088	19,478	2,33,543	-7,541	-4,064	-7,132
	Dimwah ...	8,688	639	16,939	6,739	533	13,252	-1,949	-104	-3,707
	Hernwah ...	2,260	184	4,455	2,300	4,651	4,651	-180	...	+196
	Kipra Canal ...	4,472	1,650	7,672	7,023	2,450	14,084	+2,551	+600	+7,282
	Thar Canal ...	36,289	12,483	90,504	34,638	3,149	84,946	-1,651	-9,334	-5,558
Hyderabad Canals.	Mehrabwah ...	13,382	1,421	25,548	11,714	1,296	24,043	-1,681	-125	-1,505
	Nasrat ...	21,444	4,227	59,266	19,566	3,898	55,356	-1,878	-329	-3,910
	Naolakh ...	47,788	4,965	1,16,927	43,606	4,896	1,08,164	-4,182	-69	-8,763
	Dambro ...	8,944	562	20,206	9,490	1,249	22,909	+546	+687	+2,703
	Dadwah ...	24,267	2,098	54,291	23,921	2,091	53,092	-346	+592	+801
	Renwah ...	13,012	1,138	27,542	15,662	1,315	31,761	+2,650	+127	+4,219
	Alibhar Kachori ...	8,865	33	18,195	7,969	87	16,396	-896	...	-1,799
	Marak ...	46,533	544	99,840	41,417	830	92,970	-2,936	+54	-6,870
	Ghuro Mahmuda ...	50,991	4,211	1,12,178	53,395	3,690	1,18,747	+2,551	-531	+5,666
	Kari Shumali ...	25,036	1,082	51,010	29,455	1,304	70,704	-2,581	+262	+19,694
	Nasirwah ...	26,895	1,513	52,362	27,464	1,795	62,599	+599	+482	+10,237
	Sarfravah ...	19,760	906	34,950	21,141	1,448	39,351	+1,381	+452	+4,371
Fuleli Canals.	Other canals ...	22,021	4,816	56,940	21,025	5,547	58,046	-996	+631	+1,106
	Fuleli Canals ...	227,463	40,269	5,61,087	236,444	41,090	5,90,018	+8,981	+821	+28,931
	Other canals ...	21,663	9,521	55,453	16,329	2,220	45,687	-5,334	-7,301	-9,766
Karachi Canals.	Canals north of Kotri ...	6,603	1,909	18,910	5,085	2,208	17,177	-1,518	+299	-1,733
	Kalri ...	10,179	1,569	24,616	10,506	1,274	26,271	+327	-305	+1,655
	Baghar ...	16,206	6,643	48,381	18,273	5,432	52,593	+2,069	-1,218	+4,212
	Uchita ...	8,825	1,005	19,366	10,836	1,180	23,627	+2,011	+175	+4,261
	Canals in Tatta, &c. ...	9,036	1,444	18,014	9,475	1,557	19,965	+449	+113	+1,931
	Shal Canals ...	2,664	301	7,498	2,486	657	5,363	-178	+356	-3,935
	Pinyari ...	69,718	8,239	1,66,658	65,900	2,545	1,61,827	-2,881	-5,682	-4,821
	Canals in Mirpur Batoro ...	15,710	2,033	37,415	13,763	2,405	39,074	-1,947	+372	+1,639
	Canals in Sujawal ...	6,347	1,514	13,304	6,830	491	15,313	+483	-1,023	+2,009
	Satta ...	9,077	466	18,317	9,448	858	16,637	+371	+392	-1,660
	Canals in Jati ...	1,795	256	4,784	1,892	572	4,739	+97	+346	-45
	Khanta ...	4,751	252	11,767	5,309	106	9,174	+588	-146	-2,393
	Kokawari ...	12,610	335	28,290	12,760	607	28,461	+750	+332	+171
	Canals in Shahbandar ...	1,617	77	3,931	1,904	123	4,450	+287	+46	+528
	Bunds, left bank ...	...	...	...	...	...	...	...	...	...
	Bunds, right bank ...	...	...	...	...	...	...	...	...	...
Total		1,722,040	387,764	43,83,932	1,596,939	358,218	43,27,815	-125,105	-29,546	-56,117

The figures in this statement are based on assessments.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VII.B.

Statement showing Receipts from Sale of Occupancy Rights in Waste or other Lands not belonging to Major and Minor Works but directly benefited by their construction for the year 1890-91.

District.	Name of Irrigation Work.	PARTICULARS OF THE LANDS THE OCCUPANCY RIGHTS OF WHICH WERE SOLD.				Amount of Receipts from Sale of Occupancy Rights.	Land Share 1/20.	Irrigation Share 1/10.	Sum to be credited as Indirect Revenue calculated at 4 per cent. on Irrigation share.	REMARKS.
		Taluka.	Village.	Area.	Assessments.					
1	2	3	4	5	6	7	8	9	10	11
				Acres.		Rs.	Rs.	Rs.	Rs.	
Begari Canals	Desert Canal			527		553	55	458	30	
	Unharwah			923		337	34	303	12	
	Begari Canal			131		128	13	115	6	
	Kashmor Band			94		38	6	32	2	
Bhikarpur Canals	Canals in Rohri			1,323		12,870	1,287	11,583	463	
	Bunds in Rohri									
	Sind Canal			1,031		4,234	428	3,806	158	
	Sukkur-Begari Band									
Ghose Canals	Sukkur Canal			159		3,175	318	2,857	113	
	Other do.			1,070		24,912	2,491	22,421	597	
Western Nara	Nara Canal			386		12,638	1,264	11,374	455	
	Warur do.			15		18	6	12	3	
	Marvi do.			30		196	30	166	20	
	Phitta			302		3,011	301	2,710	108	
	Dado Canals			925		7,936	793	7,143	283	
Eastern Nara	Nara Supply Channel			40		10	1	9	1	
	Mithra Canal			442		579	58	521	21	
	Dinwah			174		316	32	284	11	
	Harwah									
	Kipra Canal									
	Thar Canal									
Hyderabad Canals	Mehrabwah			216		510	131	459	18	
	Nasrat			1,070		2,362	236	2,126	107	
	Nasikh			1,353		3,615	361	3,254	132	
	Dambro			311		4,274	127	4,147	46	
	Dudwah			1,906		3,167	311	2,856	112	
	Renwah			628		543	58	485	21	
	Alibhar Nacher			127		1,015	102	913	37	
	Marak			1,319		2,883	288	2,595	104	
	Ghano Mahmuda			948		2,161	216	1,945	78	
	Rari Shumali			656		741	73	668	27	
	Nasirwah			31		70	7	63	3	
	Sarfarwah			2,352		3,738	374	3,364	134	
Fuleli Canals	Other canals			3,462		4,810	481	4,329	174	
	Fuleli			8,558		14,758	1,476	13,282	531	
Karachi Canals	Canals north of Kotri			37		213	13	190	8	
	Kalri			744		217	22	195	8	
	Baghar			603		725	73	652	26	
	Uchita			133		630	63	567	23	
	Canals in Tatta, &c.			173		116	12	104	4	
	Shal Canal			19		7	1	6	1	
	Pinyari			344		1,768	171	1,597	62	
	Canals in Mirpur Bakoto			137		539	54	485	19	
	Canals in Sujawal			190		766	77	689	27	
	Satta			4		73	7	66	3	
	Canals in Jati									
	Khanta			10						
	Kokawari			39		310	31	279	11	
	Canals in Shikhandar			10		52	5	47	2	
Bundi, left bank	Bundi, left bank									
	Bundi, right bank									
Begari Canals				4,725		1,976	468	908	39	
Bhikarpur Canals				2,407		17,151	1,715	15,433	618	
Ghose Canals				4,231		23,057	2,309	20,748	1,011	
Western Nara				2,120		19,456	1,946	17,510	700	
Eastern Nara				656		805	91	814	32	
Hyderabad Canals				13,136		24,489	2,449	22,040	882	
Fuleli Canals				8,577		14,860	1,481	13,379	521	
Karachi Canals				2,352		4,523	453	4,070	163	
Total				35,207		1,10,533	11,055	99,477	3,979	

Note I.—The figures in this statement are actuals.

Note II.—This statement has been prepared from figures furnished by Revenue Department.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VIII.

Discharges of certain Canals, Area of Crops of different kinds irrigated, and Duty of Water per cubic foot of supply for Kharif Season, 1890.

Canals and Executive Charges.		Average Discharges per cubic foot per second.	AREA OF LAND IRRIGATED.				AREA OF LAND IRRIGATED.		Total Area irrigated.	Area irrigated per cubic foot of supply.
			Jowari.	Bajri.	Rice.	Other Crops.	By Lift.	By Flow.		
1		2	3	4	5	6	7	8	9	10
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Upper Sind Frontier. - Begari Canals	Desert Canal ..	2,118	93,684	9,296	936	11,630	19,810	94,986	114,796	14'50
	Muradwah ..	415	6,449	1,406	272	3,713	1,134	10,708	11,840	25'35
	Unharwah ..	592	10,020	5,506	192	4,284	3,260	17,416	20,696	31'16
	Begari Canal ..	2,146	85,492	15,323	5,129	43,514	30,460	117,518	147,968	47'00
			199,645	29,935	5,369	63,831	54,614	240,636	296,300	
Shikarpur Collectorate.	Shikarpur Canal .. Sind Canal ..	1,688	25,104	931	21,533	4,158	14,577	39,979	54,556	32'32
	Sukkur Canal ..	1,766	18,413	1,641	29,620	8,460	8,421	49,710	(a) 55,140	33'98
	Ghar Canals ..	5,817	45,701	4,367	129,785	3,114	3,443	176,524	(b) 179,967	32'17
			61,114	6,014	150,405	11,574	11,864	226,243	238,107	
Thar and Parkar .. Eastern Nara	Mithrau ..	2,650	482	19,241	49,729	21,663	29,332	61,706	91,065	34'31
	Thar Canal ..	1,027	223	3,431	24,333	6,692	4,769	22,980	24,633	33'73
			655	22,673	74,111	28,255	34,101	91,678	115,728	
Hyderabad Collectorate.	Mehrabwah ..	382	6,898	3,037	71	1,896	10,827	1,072	11,899	31'12
	Nazrat ..	389	14,126	1,856	313	3,706	13,630	6,401	20,031	50'57
	Naolakh ..	896	28,575	6,560	627	9,354	32,429	12,887	45,316	50'57
	Mirak ..	1,147	2,538	29,238	45	16,241	46,970	1,440	48,410	42'20
	Ghalu ..	763	1,400	27,290	..	12,551	41,169	72	41,241	54'05
	Nasir ..	611	954	22,204	3	7,103	30,135	53	30,244	59'18
	Sarfas ..	465	663	19,025	..	6,530	23,483	739	26,227	56'40
			55,177	109,240	1,050	57,892	300,699	22,669	223,368	
	Fuilel ..	8,737	4,165	88,903	164,112	29,027	105,937	180,223	(c) 286,310	32'76
	Imamwah ..	178	190	6,028	2,832	1,692	7,084	3,888	(d) 10,672	59'96
	Sanhi Guni ..	225	54	80	7,776	23	25	7,908	(e) 7,938	33'28
Fuilel Canals ..	Sherwah ..	100	54	47	2,463	39	0	2,504	(f) 2,603	26'05
	Aliwah ..	171	78	30	4,694	20	..	4,822	(g) 4,822	25'19
			4,444	95,088	181,877	30,831	115,103	199,133	312,940	
Grand Total ..			342,139	263,833	446,674	196,601	429,070	830,227	1,246,297	

Notes. — (a) Exclusive of 1,532 acres of Jighir area.

(b) Do. 7,145

(c) Includes 49,706

(d) Do. 8,063

(e) Do. 417

(f) Do. 10

(g) Do. 51

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VIII.-A.
CROP RETURN
FOR
FIVE YEARS ENDING
1890-91,
(SIND.)

CROP

Canals.	Years.	KHARIF.								
		Class of								
		Rice.			Jafri.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Desert Canal...	1886-87	...	509	509	2,009	22,626	24,635	337	3,763	4,100
	1887-88	...	381	381	2,809	29,833	32,642	281	5,567	5,848
	1888-89	...	186	186	3,374	34,508	37,882	174	6,066	6,240
	1889-90	...	301	301	5,332	52,199	57,531	480	6,415	6,895
	1890-91	...	541	541	7,421	63,104	60,525	786	7,546	8,331
Unbarwah	1886-87	...	166	166	2,018	12,994	15,012	80	2,739	2,829
	1887-88	...	100	100	2,272	13,853	16,125	283	6,203	6,486
	1888-89	...	158	158	3,323	18,687	22,010	225	2,056	2,281
	1889-90	...	382	382	4,339	18,719	23,049	613	2,441	3,050
	1890-91	...	192	192	2,147	7,873	10,020	975	4,523	5,500
Begari Canal	1886-87	...	11,162	11,162	8,903	69,989	78,892	285	2,197	2,482
	1887-88	...	8,668	8,668	12,551	53,423	65,974	1,049	4,095	5,144
	1888-89	...	6,984	6,984	17,640	58,142	75,782	847	4,593	5,440
	1889-90	...	10,670	10,670	19,546	65,928	85,474	1,541	5,210	6,751
	1890-91	...	4,414	4,414	16,084	46,838	62,922	2,812	9,582	12,394
Kashmor Bund.	1886-87	...	37	37	...	636	636	...	38	38
	1887-88	...	78	78	...	541	541	...	55	55
	1888-89	...	7	7	6	800	806	...	66	66
	1889-90	...	31	31	4	1,526	1,530	...	121	121
	1890-91	...	16	16	1	330	331	2	305	307
Canals in Rohri	1886-87	...	9,726	9,726	11,319	22,331	33,650	689	1,475	2,164
	1887-88	...	6,702	6,702	15,402	23,936	39,338	1,095	1,573	2,666
	1888-89	...	8,592	8,592	20,316	24,056	44,402	1,258	1,557	2,815
	1889-90	5	9,189	9,194	13,743	25,454	39,197	1,444	4,599	5,933
	1890-91	18	11,391	11,409	6,927	20,565	27,492	604	1,654	2,258
Sind Canal	1886-87	...	25,754	25,754	5,748	13,033	18,781	12	99	111
	1887-88	...	21,236	21,236	9,765	7,975	17,740	272	215	487
	1888-89	...	30,369	30,369	10,576	12,002	22,578	114	192	306
	1889-90	2	21,276	21,278	11,998	16,825	28,823	242	266	508
	1890-91	...	22,255	22,255	11,784	11,337	23,121	535	331	866
Sukkur Canal	1886-87	...	30,086	30,086	3,683	11,047	14,730	40	138	178
	1887-88	1	26,584	26,585	6,432	10,986	17,418	62	341	403
	1888-89	...	24,454	24,454	6,879	14,602	21,481	112	346	458
	1889-90	...	27,173	27,173	7,315	15,923	23,238	344	568	912
	1890-91	8	29,612	29,620	6,332	12,081	18,413	621	1,026	1,647
Ghar Canal	1886-87	33	128,847	128,860	1,698	26,553	28,251	43	1,159	1,202
	1887-88	16	45,524	45,540	3,266	77,103	81,089	433	8,324	9,257
	1888-89	...	60,169	60,169	3,767	86,238	89,995	255	4,024	4,279
	1889-90	...	97,676	97,676	2,899	67,128	70,027	227	3,322	3,549
	1890-91	...	129,785	129,785	2,540	40,161	42,701	547	3,820	4,367
Western Nara	1886-87	1	53,425	53,426	4,999	45,187	50,186	554	2,086	2,640
	1887-88	...	48,194	48,194	8,355	38,752	47,107	1,397	4,653	6,050
	1888-89	...	57,288	57,288	7,408	34,623	42,031	828	1,568	2,396
	1889-90	...	53,580	53,580	6,414	55,460	61,874	274	2,236	2,510
	1890-91	42	71,767	71,809	20,663	35,232	55,895	2,164	1,570	3,734
Wahur	1886-87	...	136	136	1,243	4,209	5,452	188	508	696
	1887-88	...	44	44	1,309	2,847	4,156	657	394	1,051
	1888-89	...	260	260	1,654	2,701	4,355	310	307	617
	1889-90	...	259	259	1,410	3,388	4,798	208	365	573
	1890-91	...	8	8	1,066	2,494	3,560	404	403	807
Marvi	1886-87	...	101	101	1,731	691	2,422	22	36	58
	1887-88	...	38	38	1,973	474	2,447	20	47	67
	1888-89	...	61	61	2,274	678	2,952	22	26	48
	1889-90	...	105	105	2,216	471	2,687	130	12	142
	1890-91	...	57	57	1,677	583	2,260	52	8	60
Bunds, Right Bank.	1886-87	...	19	19	...	26	26	...	...	...
	1887-88	...	...	...	...	58	58	...	3	3
	1888-89	...	...	...	...	29	29	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...
Nara Supply Channel.	1886-87	...	...	...	330	...	330	18	...	18
	1887-88	...	...	...	487	...	487	...	23	23
	1888-89	...	3	3	845	...	845	...	...	...
	1889-90	1	...	1	270	...	270	2	...	26
	1890-91	...	...	...	5	...	5	2	39	71

Csors.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	28	28	85	7,774	7,859	2,431	34,700	37,131
...	11	11	134	8,043	8,177	3,224	43,835	47,059
...	53	33	196	18,047	18,243	3,744	58,840	62,584
...	40	40	275	12,298	12,573	6,087	71,253	77,340
...	55	55	103	8,039	8,142	8,310	69,284	77,594
...	14	14	375	3,473	3,848	2,483	19,386	21,869
...	22	22	381	4,491	4,872	2,936	24,669	27,605
...	74	74	621	13,191	13,812	4,169	34,166	38,335
...	138	138	446	5,195	5,641	5,398	26,872	32,270
2	109	111	155	1,888	2,043	3,279	14,587	17,866
...	295	295	1,776	36,626	38,402	10,964	120,269	131,233
4	244	248	4,227	36,211	40,438	17,831	102,641	120,472
17	268	285	5,094	53,909	59,003	23,598	123,896	147,494
3	389	392	2,427	30,436	32,863	23,517	112,633	136,150
2	245	247	1,311	21,341	22,652	20,209	82,420	102,629
3	570	573	1	1	2	4	1,282	1,286
1	450	451	1	6	7	2	1,130	1,132
...	378	378	...	57	57	6	1,308	1,314
5	612	617	...	298	298	9	2,588	2,597
...	287	267	...	409	409	3	1,327	1,330
214	750	964	223	1,622	1,845	12,445	35,904	48,349
267	792	1,059	276	2,338	3,214	17,038	35,941	52,979
378	705	1,083	460	3,767	4,227	22,442	38,677	61,119
157	660	847	127	3,590	3,717	15,506	43,402	58,908
162	719	881	63	1,155	1,218	7,774	35,484	43,258
...	163	163	631	2,655	3,286	6,391	41,704	48,095
57	79	136	1,524	3,358	4,882	11,618	32,863	44,481
54	111	165	984	5,431	6,415	11,728	38,105	49,833
31	143	179	744	4,643	5,387	13,017	43,158	56,175
41	117	158	881	2,886	3,767	13,241	36,926	50,167
4	146	150	1,408	9,377	10,785	5,135	50,794	55,929
26	160	186	2,255	8,051	10,306	8,776	46,122	54,898
17	139	156	3,251	14,622	17,873	10,259	54,163	64,422
33	324	357	1,844	10,362	12,306	9,536	54,350	63,886
55	156	211	1,405	6,844	8,249	8,421	49,719	58,140
58	616	674	356	4,331	4,687	2,188	161,486	163,674
75	353	428	700	12,754	13,454	5,216	144,558	149,768
100	397	497	829	21,444	22,273	4,951	172,262	177,213
32	339	371	334	5,014	5,408	3,562	173,479	177,031
28	210	238	328	2,548	2,876	3,443	176,524	179,967
12	153	165	293	2,675	2,968	5,859	103,526	109,385
163	223	386	483	2,492	2,975	10,398	94,314	104,712
191	239	430	593	13,585	14,178	9,020	107,303	116,323
105	236	341	247	2,910	3,157	7,040	114,422	121,462
205	160	365	280	2,308	2,588	23,354	111,037	134,391
5	34	39	18	73	91	1,454	4,960	6,414
33	15	48	42	45	87	2,041	3,345	5,386
166	36	202	23	48	71	2,153	3,352	5,505
14	30	44	5	34	39	1,637	4,076	5,713
5	26	31	8	12	20	1,483	2,943	4,426
...	2	2	11	46	57	1,764	876	2,640
...	1	1	1	25	26	1,994	585	2,579
...	1	1	20	24	44	2,316	790	3,106
3	...	3	50	4	54	2,399	592	2,991
2	1	3	14	11	25	1,745	660	2,405
...	6	6	...	2	2	...	51	51
...	...	...	...	...	...	...	63	63
...	...	...	...	...	...	...	29	29
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
10	...	10	24	8	32	382	8	390
...	8	8	...	41	41	487	77	564
19	...	19	32	1	33	922	4	926
25	1	26	25	1	26	323	86	409
5	5	5	23	2	25	83	25	108

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	1,774	1,774	...	4	4	...	635	635
...	2,364	2,364	...	12	12	...	639	639
...	3,394	3,394	...	9	9	...	3,131	3,131
...	4,575	4,575	...	10	10	1	926	927
...	2,840	2,840	...	6	6	...	1,194	1,194
...	2,081	2,081	...	19	19	...	353	353
...	1,133	1,133	...	1	1	...	768	768
...	1,862	1,862	...	10	10	38	3,709	3,747
...	1,450	1,450	...	3	3	...	145	145
...	1,669	1,669	...	8	8	...	1,062	1,062
...	1,222	1,222	...	15	15	61	2,052	2,113
9	917	926	2	19	21	548	3,887	4,435
88	1,725	1,813	33	89	122	2,620	7,675	10,255
3	729	732	12	20	32	59	2,839	2,898
31	3,360	3,391	40	261	301	133	5,312	5,445
5	3,639	3,634	1	66	57	...	125	125
3	2,519	2,522	...	17	17	...	41	41
...	2,121	2,121	...	32	32	...	49	49
...	2,603	2,603	...	16	16	...	182	182
...	2,945	2,945	...	52	52	...	70	70
576	13,429	16,005	4	85	89	4	171	175
342	21,765	22,107	7	85	92	35	299	335
806	18,404	19,210	26	56	82	3	735	738
678	10,797	11,475	2	30	32	167	1,567	1,734
215	14,452	14,667	25	84	109	41	756	797
175	2,758	2,933	...	5	5	...	340	340
785	2,011	2,796	...	4	4	10	148	158
286	3,180	3,466	6	10	16	38	530	568
278	5,643	5,921	9	28	37	68	259	327
263	7,134	7,397	10	25	35	61	2,202	2,263
1,713	5,700	7,413	26	44	70	467	1,841	2,308
2,949	10,885	13,834	35	39	74	314	766	1,030
6,575	8,568	15,443	28	79	107	633	1,716	2,349
6,175	15,010	21,185	64	150	214	581	1,703	2,284
2,620	17,812	20,432	22	132	154	335	4,970	5,305
784	4,181	4,985	1	34	35	10	661	671
2,345	7,485	9,830	16	60	76	39	2,646	2,685
358	16,019	16,377	11	88	99	12	6,711	6,723
415	25,546	25,961	5	497	502	90	18,850	18,940
405	30,407	30,812	4	954	958	89	17,082	17,171
2,242	8,443	10,685	122	373	495	239	1,897	2,136
1,983	13,130	15,113	35	382	417	348	4,535	4,883
1,857	10,594	12,451	72	147	219	182	1,188	1,370
3,515	17,719	21,234	64	533	597	213	5,104	5,317
16,907	17,554	34,461	1,506	1,016	2,522	1,674	9,318	10,992
...	451	451	...	15	15	...	47	47
3	934	987	...	19	19	...	99	99
2	471	473	2	7	9	1	17	18
14	690	704	...	5	5	12	205	217
4	1,236	1,240	1	23	24	...	382	382
486	551	1,037	7	67	74	4	8	12
610	437	1,047	7	48	55	...	7	7
651	211	862	16	92	108	...	17	17
716	162	878	8	47	55	5	177	182
191	981	1,172	22	55	77	4	473	477
...	34	34	...	...	...	...	...	...
...	46	46	...	...	...	...	...	...
...	24	24	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
275	808	1,081	...	...	...	...	180	180
467	1,112	1,579	3	...	3	...	227	227
373	1,107	1,480	...	...	...	...	449	449
172	4,713	4,885	...	2	2	...	1,230	1,230
162	5,046	5,148	...	...	...	...	578	578

RETURN.

Crops.						Total Cultivation.			REMARKS.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
...	24	24	...	2,437	2,437	2,431	37,137	39,568	
...	33	33	...	3,048	3,048	3,224	46,833	50,107	
...	84	84	...	6,613	6,618	3,744	65,458	69,292	
...	80	80	1	5,591	5,592	6,088	76,844	82,932	
...	34	34	...	4,074	4,074	8,310	73,358	81,668	
...	...	...	...	2,453	2,453	2,483	21,839	24,322	
...	...	...	...	1,902	1,902	2,936	26,571	29,507	
...	22	22	38	5,603	5,641	4,207	39,760	43,976	
...	7	7	...	1,605	1,605	5,398	28,477	33,875	
1	84	85	1	2,823	2,824	3,280	17,410	20,690	
...	483	483	61	3,772	3,833	11,025	1,24,041	1,35,066	
1	382	383	560	5,205	5,765	18,391	1,07,846	1,26,237	
66	3,474	3,540	2,807	12,963	15,770	26,405	1,36,859	1,63,264	
61	1,660	1,721	135	5,248	5,383	23,652	1,17,881	1,41,533	
58	6,414	6,472	262	15,347	15,609	20,471	97,767	1,18,238	
15	152	167	21	3,962	3,983	25	5,244	5,269	
...	128	128	3	2,705	2,708	5	3,835	3,840	
...	110	110	...	2,312	2,312	6	3,620	3,626	
...	112	112	...	2,913	2,913	9	5,501	5,510	
1	161	162	1	3,228	3,229	4	4,535	4,559	
50	980	980	634	16,615	17,249	13,079	52,519	65,598	
19	1,102	1,121	404	23,251	23,655	17,442	59,192	76,634	
55	874	929	890	20,069	20,959	23,332	58,746	82,078	
62	487	549	909	12,881	13,790	16,415	56,283	72,698	
16	756	772	297	16,048	16,345	8,071	51,532	59,603	
113	1,539	1,652	288	4,642	4,930	6,679	46,346	53,025	
141	1,332	1,473	936	3,495	4,431	12,554	36,358	48,912	
327	845	1,172	657	4,565	5,222	12,585	42,070	55,053	
266	919	1,185	621	6,849	7,470	13,638	50,007	63,645	
205	1,671	1,876	539	11,032	11,571	13,780	47,958	61,738	
78	406	484	2,284	7,991	10,275	7,419	58,785	66,204	
38	507	545	3,336	12,197	15,533	12,112	58,318	70,430	
346	1,106	1,452	7,882	11,469	19,351	18,141	65,632	83,773	
205	1,923	2,128	7,025	18,746	25,811	16,561	73,136	89,697	
101	1,222	1,323	3,078	24,136	27,214	11,499	73,855	85,354	
205	750	955	1,000	5,826	6,626	3,188	1,67,102	1,70,300	
413	1,188	1,601	2,813	11,379	14,192	8,023	1,55,937	1,63,960	
23	3,953	3,976	494	26,771	27,173	5,353	1,99,033	2,04,388	
36	5,075	5,111	546	49,968	50,514	4,098	2,23,447	2,27,545	
18	4,070	4,088	516	52,513	53,023	3,959	2,29,037	2,32,996	
130	666	796	2,733	11,379	14,112	8,592	1,14,905	1,23,497	
44	1,839	1,883	2,410	19,886	22,296	12,808	1,14,200	1,27,008	
162	643	805	2,273	12,572	14,845	11,293	1,19,875	1,31,168	
47	2,668	2,715	3,839	26,024	29,863	10,879	1,40,446	1,51,325	
1,382	5,258	6,640	21,469	33,146	54,615	44,823	1,44,183	1,89,006	
...	9	9	...	522	522	1,454	5,482	6,936	
...	28	28	3	1,130	1,133	2,044	4,475	6,519	
37	124	161	42	619	661	2,195	3,971	6,166	
18	76	88	44	970	1,014	1,681	5,046	6,727	
...	114	114	5	1,755	1,760	1,488	4,698	6,186	
4	9	13	501	635	1,136	2,265	1,551	3,816	
...	1	1	617	493	1,110	2,611	1,078	3,689	
2	7	9	869	327	996	2,985	1,117	4,102	
4	28	32	733	414	1,147	3,132	1,066	4,138	
...	3	3	217	1,512	1,729	1,962	2,172	4,134	
...	2	2	...	36	36	...	87	87	
...	4	4	...	50	50	...	113	113	
...	2	2	...	26	26	...	55	55	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	32	32	273	1,020	1,293	655	1,028	1,683	
...	89	89	470	1,428	1,898	957	1,505	2,462	
...	183	183	373	1,739	2,112	1,295	1,743	3,038	
8	189	197	180	6,134	6,314	503	6,220	6,723	
6	203	209	108	5,827	5,935	191	5,852	6,043	

Includes that portion of the Western Nara in the Karschi Collection.

Canals.	Years.	KHARIF.								
		CLASS OF								
		Rice.			Juarí.			Bájrí.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Eastern Nárá...	1886-87 ...	...	3,082	3,082	1	72	73	113	7,727	7,840
	1887-88 ...	...	3,305	3,305	...	56	56	81	12,229	12,310
	1888-89 ...	...	4,636	4,636	3	21	24	288	22,005	22,393
	1889-90 ...	...	5,265	5,265	1	7	8	264	12,555	12,810
	1890-91 ...	...	5,795	5,795	10	26	36	355	5,709	6,064
Mithrao Canal.	1886-87 ...	...	50,361	50,361	208	291	499	5,888	4,831	10,719
	1887-88 ...	3	54,850	54,853	239	148	387	6,565	9,226	15,791
	1888-89 ...	...	56,620	56,620	420	122	542	8,239	9,293	17,532
	1889-90 ...	...	58,369	58,369	286	306	592	12,788	7,583	20,371
	1890-91 ...	...	49,729	49,729	339	93	432	14,661	4,583	19,244
Dimwáh ...	1886-87 ...	...	...	...	103	...	103	876	354	1,230
	1887-88 ...	...	...	...	48	...	48	857	...	1,823
	1888-89 ...	...	...	...	91	3	94	801	766	1,567
	1889-90 ...	73	...	73	214	105	319	2,948	2,068	4,956
	1890-91 ...	...	...	...	147	106	253	2,810	1,314	4,124
Heranwáh ...	1886-87 ...	...	25	25	91	...	91	247	1	248
	1887-88 ...	...	...	...	64	3	67	487	280	767
	1888-89 ...	...	...	...	155	6	161	677	319	996
	1889-90 ...	101	...	101	10	...	10	853	122	975
	1890-91 ...	...	...	...	73	5	78	829	290	1,119
Kipra Canal ...	1886-87 ...	...	...	...	...	...	...	...	...	...
	1887-88 ...	...	...	...	...	...	...	...	...	...
	1888-89 ...	...	...	...	...	...	...	...	...	...
	1889-90 ...	...	...	...	23	...	23	457	3,342	3,799
	1890-91 ...	159	...	159	8	24	32	227	5,285	5,512
Thar Canal ...	1886-87 ...	...	16,098	16,098	63	...	63	67	1,701	1,768
	1887-88 ...	...	20,082	20,082	10	19	29	126	1,610	1,736
	1888-89 ...	...	24,996	24,996	12	2	14	501	5,152	5,653
	1889-90 ...	...	25,827	25,827	7	...	7	2,333	3,954	6,287
	1890-91 ...	...	24,382	24,382	205	18	223	2,011	1,420	3,431
Mehrabwáh ...	1886-87 ...	...	29	29	7,868	174	8,032	1,932	18	1,950
	1887-88 ...	15	41	56	8,246	...	8,246	2,532	93	2,625
	1888-89 ...	...	27	27	8,637	332	8,969	2,564	16	2,580
	1889-90 ...	...	49	49	7,618	466	8,084	2,818	51	2,869
	1890-91 ...	...	71	71	6,626	220	6,846	2,941	59	3,000
Nasrat ...	1886-87 ...	55	11	66	10,609	1,548	12,157	1,213	56	1,269
	1887-88 ...	3	98	101	8,142	3,648	11,790	1,234	209	1,443
	1888-89 ...	3	158	161	11,220	3,431	14,654	775	85	860
	1889-90 ...	...	228	228	11,215	3,843	15,058	1,335	99	1,434
	1890-91 ...	9	303	312	10,215	3,487	13,702	1,688	178	1,866
Naolskhi ...	1886-87 ...	...	419	419	20,143	7,507	27,650	4,033	356	4,389
	1887-88 ...	10	334	344	20,592	6,212	26,804	4,665	335	5,000
	1888-89 ...	21	357	378	22,146	5,813	27,959	4,153	275	4,428
	1889-90 ...	12	348	360	23,610	6,625	30,235	4,588	388	4,726
	1890-91 ...	4	452	456	19,714	7,431	27,145	5,590	828	6,418
Dambro ...	1886-87 ...	1	30	31	4,131	313	4,444	1,275	44	1,319
	1887-88 ...	1	...	1	3,745	277	4,022	1,553	44	1,597
	1888-89 ...	...	17	17	4,460	401	4,861	1,120	74	1,194
	1889-90 ...	...	14	14	6,137	541	6,678	1,516	87	1,603
	1890-91 ...	...	17	17	5,555	476	6,031	2,593	126	2,719
Dad ...	1886-87 ...	17	548	565	5,456	694	6,150	3,709	314	4,023
	1887-88 ...	...	772	772	6,430	962	7,392	4,231	280	4,520
	1888-89 ...	...	673	673	7,989	976	8,965	4,408	269	4,697
	1889-90 ...	...	425	425	8,837	1,158	9,995	4,674	324	4,998
	1890-91 ...	1	553	554	7,438	1,126	8,564	5,110	579	5,689
Ren ...	1886-87 ...	...	131	131	3,041	33	3,074	9,433	30	9,463
	1887-88 ...	...	...	...	1,027	17	1,044	10,257	52	10,309
	1888-89 ...	...	172	172	1,703	6	1,709	8,260	13	8,273
	1889-90 ...	...	125	125	1,623	26	1,649	8,053	79	8,132
	1890-91 ...	...	231	231	1,532	40	1,572	9,242	248	9,790
Alibahr cheri. Ka-	1886-87 ...	...	...	...	902	...	902	4,129	...	4,129
	1887-88 ...	...	...	...	394	...	394	4,342	...	4,342
	1888-89 ...	...	...	...	961	...	961	3,194	...	3,194
	1889-90 ...	...	...	...	1,143	...	1,143	5,801	...	5,801
	1890-91 ...	...	...	...	701	11	712	5,392	62	5,454

Caop.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
14	218	232	5	451	456	133	11,550	11,683
10	99	109	14	832	846	105	16,521	16,626
66	463	469	45	1,447	1,492	402	29,112	29,514
70	81	151	15	2,961	2,976	350	20,870	21,220
27	989	1,016	43	550	593	435	13,069	13,504
2,157	818	2,975	1,484	2,609	4,093	9,737	58,910	68,647
2,261	1,356	3,617	2,355	6,073	8,428	11,423	71,653	83,076
4,769	3,014	7,783	2,762	8,804	11,566	16,190	77,853	94,043
6,399	3,589	9,988	4,238	5,951	9,309	23,731	74,898	98,629
11,824	4,485	16,309	2,558	2,816	5,374	29,382	61,706	91,088
417	...	417	124	7	131	1,520	361	1,881
405	3	408	135	61	196	1,545	930	2,475
648	31	679	199	537	736	1,739	1,337	3,076
1,423	1,019	2,442	363	535	898	4,948	3,740	8,688
1,415	359	1,774	374	214	588	4,746	1,993	6,739
112	5	117	19	110	129	469	141	610
282	36	298	90	224	314	903	543	1,446
490	113	603	165	521	686	1,487	959	2,446
503	28	531	125	518	643	1,491	769	2,260
431	1	432	126	345	471	1,459	641	2,100
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
33	40	61	80	509	589	531	3,891	4,472
21	806	829	50	431	481	318	6,705	7,023
21	544	565	47	734	781	198	19,077	19,275
50	682	732	91	1,340	1,431	277	23,733	24,010
66	898	964	133	1,711	1,894	762	32,759	33,521
304	319	623	965	2,580	3,545	3,609	32,680	36,289
1,800	3,498	5,298	753	551	1,304	4,769	29,869	34,638
68	...	68	350	434	784	10,208	655	10,863
81	3	84	1,209	461	1,690	11,367	1,034	12,401
102	1	103	1,095	736	1,831	12,098	1,012	13,110
102	8	110	1,326	944	2,270	11,864	1,518	13,382
147	...	147	1,007	643	1,650	10,721	993	11,714
170	44	214	1,003	771	1,774	13,050	2,430	15,480
137	65	202	1,434	1,235	2,669	10,950	5,255	16,205
186	73	259	2,632	1,762	4,444	14,866	5,512	20,378
177	81	258	1,739	2,727	4,466	14,466	6,978	21,444
203	70	273	1,305	2,108	3,413	13,420	6,146	19,566
255	70	325	7,612	2,013	9,625	32,043	10,365	42,408
255	35	290	8,615	3,574	12,189	34,137	10,490	44,627
238	64	302	9,809	4,294	14,103	36,367	10,803	47,170
196	47	243	7,691	4,533	12,224	35,897	11,891	47,788
285	77	362	5,989	3,236	9,225	31,582	12,024	43,606
16	...	16	450	89	539	5,873	476	6,349
30	1	31	631	127	808	6,010	449	6,459
12	8	20	749	91	840	6,341	591	6,932
20	...	20	604	25	629	8,277	667	8,944
38	2	40	571	112	683	8,767	733	9,499
36	...	36	4,085	2,116	6,201	13,303	3,672	16,975
66	2	53	5,458	2,814	8,332	16,205	4,859	21,064
31	1	32	5,853	3,324	9,176	18,280	5,263	23,543
58	10	68	5,441	3,340	8,781	19,010	5,257	24,267
94	10	104	5,629	3,381	9,010	18,272	5,649	23,921
2,166	6	2,172	1,957	25	1,982	16,597	225	16,822
796	1	797	2,215	5	2,220	14,295	75	14,370
1,382	...	1,382	1,942	9	1,951	13,287	200	13,487
1,283	4	1,287	1,771	48	1,819	12,730	282	13,012
1,530	15	1,545	2,479	45	2,524	15,083	579	15,662
847	...	847	463	...	463	6,341	...	6,341
321	...	321	555	...	555	5,642	...	5,642
1,013	...	1,013	718	...	718	5,886	...	5,886
1,161	...	1,161	711	49	760	8,316	49	8,365
952	10	962	833	8	841	7,873	91	7,964

CLASS OF

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
25	3,138	3,163	4	75	79	6	2,292	2,298
53	3,629	3,682	6	105	111	14	3,157	3,171
135	3,773	3,908	8	104	112	56	2,973	3,029
209	14,308	14,517	8	85	93	139	44,687	44,826
164	9,057	9,221	10	47	57	55	15,948	16,003
2,218	8,613	10,836	59	51	110	633	3,703	4,336
2,604	10,207	12,811	100	208	308	1,051	4,594	5,645
5,749	9,784	15,533	235	202	437	1,638	4,913	6,571
5,239	8,643	13,882	218	259	477	1,609	3,911	5,520
7,153	8,445	15,598	160	112	272	1,095	2,145	3,240
208	27	235	...	...	...	56	88	144
2	...	2	...	...	...	40	43	83
...	4	4	...	...	...	...	69	69
69	19	88	...	...	...	352	86	438
178	10	188	...	...	...	25	320	345
30	52	82	...	...	...	1	...	1
62	61	113	...	...	...	2	14	16
...	32	32	...	...	...	...	13	13
125	...	125	...	...	...	50	...	50
96	139	235	...	...	...	1	3	4
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	199	199	8	24	32	227	1,448	1,448
...	698	700	...	9	9	5	5,385	5,512
...	...	...	...	...	...	...	1,510	1,515
47	898	945	...	18	18	45	1,388	1,433
71	1,578	1,649	1	35	36	99	4,359	4,458
282	2,441	2,723	18	72	90	496	5,515	6,011
765	2,565	3,330	9	21	30	1,283	6,747	8,030
664	1,327	1,991	16	30	46	307	453	760
221	7	228	3	...	3	277	29	306
117	129	246	4	...	4	16	8	24
304	9	313	8	...	8	82	10	92
1154	56	1,210	14	3	17	69	49	118
922	16	938	11	1	12	268	5	263
840	992	1,832	12	5	17	113	63	176
917	1,244	2,161	16	11	27	90	138	228
956	1,002	1,958	16	17	33	125	36	161
2,298	1,394	3,692	30	17	47	150	122	272
1,781	1,466	3,247	29	7	36	236	159	395
1,940	1,029	2,969	27	22	49	253	52	305
1,969	1,456	3,425	26	28	54	211	132	343
1,863	1,480	3,343	34	24	58	192	52	244
2,546	1,734	4,280	41	15	56	183	172	355
1,918	2,125	4,043	50	53	103	132	204	336
424	35	459	32	4	36	17	2	19
660	18	578	33	6	39	36	2	38
284	103	387	9	6	15	29	61	90
380	160	540	10	1	11	4	1	5
760	314	1,074	15	1	16	...	159	159
384	874	1,258	15	27	42	829	581	1,410
326	497	823	30	14	34	36	185	221
259	624	883	26	20	46	78	138	216
287	832	1,119	21	51	72	261	383	634
441	947	1,388	23	77	100	288	426	714
242	67	309	5	...	5	820	1,051	1,871
178	131	309	1	6	7	84	84	168
75	119	194	...	1	1	21	38	59
127	222	349	3	3	6	317	364	681
191	129	320	4	2	6	238	691	929
...	...	...	...	...	...	52	3	55
7	...	7	...	...	...	1	...	1
1	...	1	...	...	...	2	...	2
3	...	3	...	...	...	12	...	17
8	...	8	8	...	8	1	6	7

RETURN—continued.

Crops.						Total Cultivation.			REMARKS.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
62	1,153	1,215	97	6,658	6,755	220	18,208	18,438	
116	1,054	1,170	189	7,345	8,134	294	24,466	24,760	
56	1,688	1,744	255	8,558	8,793	657	37,650	38,307	
180	4,938	5,118	536	64,018	64,554	886	84,888	85,774	
61	11,245	11,306	290	36,297	36,587	725	49,366	50,091	
98	3,679	3,777	3,008	16,051	19,059	12,745	74,961	87,706	
234	2,987	3,152	3,920	17,996	21,916	15,343	89,649	104,992	
749	5,021	5,255	7,876	19,920	27,796	24,066	97,773	121,839	
61	2,914	3,663	7,815	15,727	23,542	31,546	90,625	122,171	
	307	368	8,469	11,009	19,478	37,851	72,715	110,566	
9	...	9	273	115	388	1,793	476	2,269	
11	...	11	53	43	96	1,598	973	2,571	
...	...	...	...	73	73	1,739	1,410	3,149	
9	104	113	430	209	639	5,378	3,349	9,327	
...	...	...	203	330	533	4,949	2,923	7,272	
...	10	10	31	62	93	499	204	703	
...	...	...	54	75	129	957	618	1,575	
...	9	9	...	54	54	1,487	1,013	2,500	
9	...	9	184	...	184	1,675	769	2,444	
...	1	1	97	143	240	1,556	784	2,340	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	1,650	1,650	581	5,541	6,122	
...	26	26	7	2,243	2,250	325	8,948	9,273	
14	704	718	106	3,008	3,114	304	22,085	22,389	
82	1,550	1,632	253	7,522	7,775	530	31,255	31,785	
234	2,288	2,522	1,030	10,316	11,346	1,792	43,075	44,867	
294	799	1,093	2,351	10,133	12,483	5,960	42,812	48,772	
64	288	352	1,051	2,098	3,149	5,820	31,967	37,787	
439	19	458	940	55	995	11,118	710	11,858	
38	19	57	175	156	331	11,542	1,190	12,732	
577	...	577	971	19	990	13,069	1,031	14,100	
72	3	75	1,309	111	1,420	13,173	1,629	14,802	
80	3	83	1,271	25	1,296	11,992	1,018	13,010	
44	58	102	1,009	1,118	2,127	14,059	3,548	17,607	
55	91	146	1,078	1,484	2,562	12,028	6,739	18,767	
71	37	108	1,168	1,092	2,260	16,034	6,604	22,638	
82	134	216	2,560	1,667	4,227	17,026	8,645	25,671	
59	161	220	2,105	1,793	3,898	15,525	7,939	23,464	
157	130	287	2,377	1,233	3,610	34,420	11,598	46,018	
198	206	404	2,404	1,822	4,226	36,541	12,512	48,853	
90	153	243	2,179	1,709	3,888	38,546	12,512	51,058	
165	108	273	2,935	2,029	4,964	38,832	13,920	52,752	
126	288	414	2,226	2,670	4,896	33,808	14,694	48,502	
9	...	9	482	41	523	6,355	517	6,872	
12	2	14	641	28	669	6,651	477	7,128	
12	13	25	334	183	517	6,674	775	7,449	
6	...	6	400	162	562	8,677	829	9,506	
...	...	...	775	474	1,249	9,532	1,207	10,739	
99	853	952	1,327	2,335	3,662	14,630	6,007	20,637	
15	494	509	397	1,190	1,587	16,602	6,049	22,651	
38	199	237	401	981	1,382	18,681	6,244	24,925	
89	155	274	648	1,451	2,099	19,658	6,708	26,366	
22	467	489	774	1,317	2,691	19,046	7,566	26,612	
31	155	186	1,098	1,273	2,371	17,695	1,498	19,193	
32	112	144	295	333	628	14,590	408	14,998	
27	75	102	123	233	356	13,410	433	13,843	
15	87	102	462	676	1,138	13,192	958	14,150	
11	49	60	444	571	1,315	15,527	1,450	16,977	
51	67	82	67	70	137	6,408	70	6,478	
16	68	79	19	68	87	5,661	68	5,729	
1	66	69	6	66	72	5,892	66	5,958	
3	12	13	16	17	33	8,332	66	8,398	
1	58	64	23	64	87	7,901	155	8,056	

Canals,	Years.	Kharif								
		CLASS OF								
		Rice.			Jafri.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Great Mārak...	1886-87	...	22	22	3,393	110	3,503	18,574	374	18,948
	1887-88	...	11	11	2,491	52	2,543	20,099	453	20,552
	1888-89	...	...	...	3,487	59	3,546	20,757	324	21,081
	1889-90	2	7	9	3,859	138	3,997	23,539	349	23,888
	1890-91	...	43	43	2,482	80	2,562	23,833	816	24,649
Gharo Mah-muda.	1886-87	...	178	262	2,664	13	2,677	26,468	192	26,660
	1887-88	110	11	121	1,965	2	1,967	27,731	162	27,893
	1888-89	...	150	150	2,739	14	2,753	27,542	174	27,716
	1889-90	112	22	134	3,366	53	3,419	28,408	419	28,827
	1890-91	...	106	106	2,711	141	2,852	31,709	1,413	33,122
Kari Shumālī...	1886-87	...	...	...	853	5	858	16,468	179	16,647
	1887-88	...	13	13	1,171	1	1,172	18,211	15	18,226
	1888-89	...	...	...	1,862	2	1,864	20,138	41	20,179
	1889-90	...	...	...	1,499	5	1,504	20,682	118	20,800
	1890-91	...	...	...	1,040	9	1,049	21,997	48	22,045
Nasir ...	1886-87	...	6	6	671	...	671	14,928	...	14,928
	1887-88	...	...	...	1,105	...	1,105	16,828	4	16,832
	1888-89	...	55	55	912	...	912	18,164	3	18,167
	1889-90	...	3	3	1,102	...	1,102	18,089	2	18,091
	1890-91	...	3	3	887	...	887	20,089	8	20,097
Sarfrāz	1886-87	...	13	18	496	19	515	13,094	143	13,237
	1887-88	...	4	4	312	...	312	12,610	40	12,650
	1888-89	...	12	12	456	7	463	13,206	260	13,466
	1889-90	...	...	...	641	34	675	13,970	421	14,391
	1890-91	...	...	...	563	35	598	14,813	452	15,265
Other Canals.	1886-87	...	75	75	9,027	822	9,849	8,154	224	8,378
	1887-88	...	77	77	6,896	1,003	7,839	8,924	198	9,122
	1888-89	...	26	26	8,352	1,237	9,589	8,089	220	8,309
	1889-90	7	38	45	9,490	1,404	10,894	8,665	206	8,871
	1890-91	1	64	65	8,405	1,105	9,510	8,370	693	9,063
Fulci ...	1886-87	247	115,226	115,473	2,020	1,799	3,819	41,368	5,343	46,711
	1887-88	49	126,186	126,235	1,571	501	2,372	47,878	3,696	51,574
	1888-89	19	127,060	127,079	2,383	1,537	3,920	52,883	5,653	58,536
	1889-90	18	122,845	122,863	2,932	3,120	6,052	60,814	14,292	75,106
	1890-91	14	136,274	136,288	1,924	1,360	3,284	64,782	8,700	73,482
Other Canals...	1886-87	...	8,711	8,711	270	34	304	4,274	247	4,521
	1887-88	...	9,169	9,169	145	3	148	5,152	106	5,258
	1888-89	...	9,149	9,149	373	62	435	6,075	356	6,431
	1889-90	...	10,418	10,418	596	157	753	8,047	1,380	9,427
	1890-91	...	8,737	8,737	319	56	375	5,317	291	5,608
Nāra ...	1886-87	...	21,568	21,568	13,044	6,422	19,466	388	132	470
	1887-88	...	17,312	17,312	7,824	9,351	17,175	860	219	1,079
	1888-89	8	18,311	18,319	16,683	3,844	20,527	434	83	517
	1889-90	31	13,944	13,975	19,417	7,723	27,140	737	167	904
	1890-91	...	...	...	...	...	...	...	...	...
Phitta...	1886-87	...	327	327	2,929	7	2,936	74	...	74
	1887-88	...	255	255	1,988	1,233	3,221	115	...	115
	1888-89	1	234	235	3,859	32	3,891	91	...	191
	1889-90	...	281	281	3,372	43	3,420	153	...	153
	1890-91	...	539	539	2,977	1,536	4,313	191	...	191
Canals north of Kotri.	1886-87	...	1,074	1,074	5,193	1,250	6,443	2,986	58	3,044
	1887-88	...	918	918	4,966	1,462	6,428	3,260	177	3,437
	1888-89	1	687	688	6,310	1,796	8,106	2,877	222	3,099
	1889-90	...	422	423	6,493	2,549	9,042	3,244	364	3,608
	1890-91	...	560	560	1,917	211	2,128	1,979	21	2,000
Kalri ...	1886-87	...	5,167	5,167	552	...	552	1,392	...	1,392
	1887-88	...	4,797	4,797	402	...	492	1,444	...	1,444
	1888-89	...	5,685	5,685	597	...	597	2,178	130	2,308
	1889-90	...	5,256	5,256	819	...	819	2,871	...	2,871
	1890-91	...	5,766	5,766	520	3	523	3,137	21	3,158
Baghar	1886-87	...	7,128	7,128	...	...	...	4,026	...	4,026
	1887-88	...	6,787	6,787	1	...	1	4,154	...	4,154
	1888-89	16	7,922	7,938	28	...	28	5,414	66	5,480
	1889-90	...	7,421	7,421	56	...	56	4,084	874	4,958
	1890-91	3	10,130	10,133	9	1	10	5,829	311	6,140

Crops.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
10,151	317	10,468	2,633	101	2,734	34,751	924	35,675
8,437	337	8,774	3,157	223	3,380	34,184	1,076	35,260
11,802	401	12,203	3,224	172	3,396	39,270	956	40,226
12,906	268	13,174	4,179	106	4,285	44,485	868	45,353
10,226	296	10,522	3,498	293	3,641	39,979	1,438	41,417
11,172	58	11,230	2,368	36	2,404	42,850	353	43,233
9,286	85	9,371	2,872	103	2,975	41,964	363	42,327
12,343	113	12,456	3,507	108	3,615	46,131	559	46,690
14,683	255	14,938	3,473	200	3,673	50,042	949	50,991
13,933	446	14,379	3,208	139	3,347	51,561	2,245	53,806
7,447	34	7,481	2,818	45	2,863	27,586	263	27,849
8,406	10	8,416	3,179	1	3,180	27,967	40	28,007
8,492	14	8,506	3,136	9	3,145	33,628	66	33,694
9,224	1	9,225	3,487	26	3,507	34,892	144	35,036
7,032	10	7,042	2,314	5	2,319	32,353	72	32,425
7,302	...	7,302	2,101	...	2,101	24,902	6	24,908
5,254	15	5,269	2,117	...	2,117	25,304	19	25,323
6,170	15	6,185	1,752	1	1,753	26,998	74	27,072
6,103	...	6,103	1,595	1	1,596	26,889	6	26,895
4,867	45	4,912	1,563	2	1,565	27,406	58	27,464
3,085	25	3,110	1,785	9	1,794	18,460	214	18,674
2,598	55	2,653	1,647	21	1,668	17,167	120	17,287
3,333	10	3,343	1,616	156	1,769	18,011	439	19,050
3,268	51	3,319	1,273	102	1,375	18,152	608	19,760
3,438	98	3,536	1,684	58	1,742	20,498	643	21,141
161	9	170	1,892	136	2,028	19,234	1,266	20,500
133	3	136	2,219	158	2,377	18,112	1,439	19,551
199	3	202	1,866	176	2,042	18,506	1,662	20,163
237	7	244	1,750	217	1,967	20,149	1,872	22,021
230	21	251	1,741	385	2,126	18,747	2,268	21,015
4,988	744	5,732	8,006	2,247	10,253	56,629	125,359	181,989
4,573	464	5,037	7,031	2,362	9,393	61,102	135,509	194,611
8,011	733	8,744	7,581	2,353	10,439	70,577	137,841	208,718
10,829	1,665	12,494	8,084	2,864	10,948	82,677	144,786	227,463
11,454	1,823	13,277	8,290	1,823	10,113	86,464	149,980	236,444
123	3	126	526	197	723	5,193	9,192	14,385
100	...	100	674	334	1,008	6,071	9,612	15,683
141	23	164	663	260	923	7,252	9,850	17,102
236	45	281	441	343	784	9,320	12,343	21,663
372	202	574	682	353	1,035	6,690	9,639	16,329
26	...	26	320	298	618	13,728	28,420	42,148
23	1	24	568	131	699	9,275	27,014	36,289
27	1	28	449	131	580	17,601	22,370	39,971
11	...	11	278	241	519	20,474	22,075	42,549
...	...	...	...	...	...	...	...	...
1	...	1	84	...	84	3,068	334	3,422
1	...	1	15	96	111	2,119	1,584	3,703
10	...	10	92	...	92	4,053	266	4,319
1	...	1	86	2	88	3,612	331	3,943
14	...	14	20	32	52	3,202	1,907	5,109
92	50	142	576	17	593	8,847	2,449	11,296
130	...	130	539	225	764	8,945	2,782	11,727
230	15	245	476	255	731	9,944	2,975	12,919
299	26	325	379	132	511	10,416	3,493	13,909
219	38	257	99	41	140	4,214	871	5,085
1	...	1	952	68	1,020	2,897	5,235	8,132
1	...	1	1,041	27	1,068	2,888	4,824	7,712
...	...	...	1,170	...	1,170	3,945	5,815	9,760
...	...	...	913	320	1,233	4,603	5,576	10,179
1	...	1	642	416	1,058	4,300	6,206	10,506
...	...	...	2,556	20	2,576	6,582	7,148	13,730
...	...	...	2,410	51	2,461	6,865	6,838	13,403
...	...	...	3,259	131	3,410	8,717	8,159	16,856
...	...	...	3,681	90	3,771	7,821	8,385	16,206
...	...	...	1,793	199	1,992	7,634	10,641	18,275

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
7	2	9	...	...	...	205	15	220
3	23	26	...	...	...	16	47	63
...	17	17	...	...	...	52	54	116
...	28	28	...	...	...	3	192	195
34	2	36	...	...	...	224	202	426
120	296	416	...	...	...	53	636	689
93	157	250	4	...	4	132	527	659
171	167	338	...	...	...	99	221	320
156	425	581	1	1	2	322	1,719	2,041
157	372	529	...	...	...	116	666	716
4	141	145	...	...	...	40	34	74
76	181	257	3	...	3	62	23	85
97	197	294	...	...	...	25	44	69
106	218	324	...	...	...	153	172	325
77	255	332	...	...	...	72	511	583
...	103	103	...	...	...	14	47	61
...	108	108	...	...	...	10	24	34
...	78	78	...	...	...	15	32	47
7	150	157	...	...	...	156	142	298
10	231	241	...	...	...	37	478	515
3	200	203	...	...	...	11	118	129
...	203	203	...	1	1	4	67	71
...	124	124	...	...	...	...	112	112
45	323	368	...	...	...	109	118	227
11	420	431	...	4	4	69	481	550
1,815	669	2,484	52	47	99	1,155	268	1,423
1,940	688	2,628	52	56	108	254	116	370
1,572	602	2,174	55	15	70	209	75	284
2,455	1,211	3,666	45	40	185	434	594	828
2,308	1,209	3,577	43	27	70	407	1,111	1,518
834	3,298	4,132	86	379	685	545	6,165	6,710
194	4,569	4,763	51	949	1,000	111	8,938	9,049
551	3,946	4,497	86	1,677	1,763	702	13,224	13,926
577	7,957	8,334	185	2,350	3,035	1,358	17,645	19,003
324	8,171	8,495	86	2,384	2,420	785	17,803	18,588
76	94	170	3	13	16	17	35	52
19	157	176	3	10	13	36	52	88
40	163	193	...	11	11	34	125	159
472	1,436	1,908	459	1,344	1,803	2,107	2,320	4,427
79	782	861	6	140	146	24	994	1,018
2,040	19,521	21,561	404	247	651	113	2,440	2,553
5,014	10,573	15,587	102	223	325	236	752	988
2,679	8,945	11,624	101	150	251	311	1,350	670
4,078	13,859	17,937	161	188	349	585	3,409	3,994
...	...	...	...	...	...	...	...	...
190	711	901	10	152	162	...	65	65
86	927	1,013	15	178	193	...	39	39
65	272	337	10	9	19	...	...	...
306	671	977	24	177	201	44	90	134
1,277	...	1,277	...	216	216	34	117	151
423	493	916	17	18	35	13	735	748
296	848	1,144	3	48	51	85	807	892
404	554	958	7	21	28	60	239	299
780	1,188	1,968	49	50	99	55	1,303	1,358
46	856	902	1	2	3	...	816	816
...	...	...	...	320	320	...	31	31
...	...	...	...	170	170	...	2	2
...	...	...	50	284	334	...	20	20
...	46	46	...	865	865	...	34	34
...	8	8	...	219	219	...	335	335
...	4	4	...	1,932	1,932	...	24	24
...	...	...	27	1,733	1,760	...	12	12
...	3	3	...	1,227	1,227	...	5	5
...	...	...	118	5,186	5,304	3	133	136
...	158	158	80	2,360	2,440	...	659	659

RETURN—continued.

Crops.						Total Cultivation.			REMARKS.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
21	370	391	233	337	620	34,984	1,311	36,295	
18	341	359	37	411	448	34,221	1,487	35,708	
25	360	385	77	441	518	39,347	1,397	40,744	
4	317	321	7	537	544	44,492	1,405	45,897	
32	336	368	290	540	830	40,269	1,978	42,247	
198	1,579	1,777	371	2,511	2,882	43,221	2,894	46,115	
211	1,572	1,783	440	2,256	2,696	42,404	2,619	45,023	
188	1,403	1,591	458	1,791	2,249	46,589	2,350	48,939	
36	1,551	1,587	515	3,696	4,211	50,557	4,645	55,202	
214	2,201	2,415	481	3,179	3,660	52,042	5,424	57,466	
36	202	238	80	377	457	27,668	640	28,306	
47	205	252	188	409	597	28,155	449	28,604	
106	253	339	228	494	722	33,856	560	34,416	
168	2.5	393	427	615	1,042	35,319	759	36,078	
64	325	389	213	1,091	1,304	32,596	1,163	33,759	
238	420	658	252	570	822	23,154	576	23,730	
404	562	966	414	694	1,108	25,718	713	26,431	
386	287	673	401	397	798	27,399	471	27,870	
389	469	858	552	761	1,313	27,441	767	28,208	
281	758	1,039	328	1,467	1,795	27,734	1,525	29,259	
49	386	435	63	704	767	18,523	918	19,441	
118	324	442	122	595	717	17,289	715	18,004	
80	164	244	80	400	480	18,691	839	19,530	
101	300	401	255	741	996	19,407	1,349	20,756	
91	372	463	171	1,277	1,448	20,669	1,920	22,589	
185	332	517	3,207	1,316	4,523	22,441	2,582	25,023	
139	280	419	2,385	1,140	3,525	20,497	2,579	23,076	
104	101	205	1,940	793	2,733	20,446	2,455	22,901	
158	179	337	3,062	1,824	4,916	23,241	3,696	26,937	
72	310	382	2,830	2,717	5,547	21,577	4,985	26,562	
944	4,718	5,662	2,409	14,760	17,169	59,038	140,119	199,157	
1,245	9,872	11,117	1,601	24,328	25,929	62,703	157,837	220,540	
1,088	4,585	5,673	2,427	23,432	25,859	73,304	161,273	294,577	
1,250	8,647	9,897	3,370	36,899	40,269	86,047	181,685	267,732	
888	10,699	11,687	2,053	39,037	41,090	88,497	189,037	277,534	
177	399	486	273	451	724	5,466	9,643	15,109	
195	365	560	253	584	837	6,324	10,196	16,520	
130	322	452	204	611	815	7,456	10,461	17,917	
468	915	1,383	3,506	6,015	9,521	12,826	18,358	31,184	
3	192	195	112	2,108	2,220	6,862	11,747	18,549	
345	5,105	5,450	2,907	27,313	30,220	16,635	55,733	72,368	
14	2,754	2,768	5,396	14,302	19,698	14,641	41,316	55,957	
452	2,098	2,550	3,543	12,552	16,095	21,144	34,922	56,066	
597	5,332	5,929	5,421	22,788	28,209	25,895	44,863	70,758	
...	...	...	...	...	...	...	...	...	
...	322	322	200	1,250	1,450	3,288	1,584	4,872	
...	334	334	101	1,478	1,579	2,220	3,062	5,282	
33	7	40	108	288	396	4,161	554	4,715	
65	212	277	439	1,150	1,589	4,051	1,481	5,532	
238	...	238	1,549	333	1,882	4,751	2,240	6,991	
69	321	390	522	1,567	2,089	9,369	4,016	13,385	
67	473	540	451	2,176	2,627	9,396	4,958	14,354	
88	113	206	559	952	1,491	10,593	3,907	14,410	
154	282	430	1,038	2,823	3,861	11,454	6,310	17,770	
64	423	487	111	2,087	2,208	4,325	2,008	7,293	
130	509	639	130	860	990	3,027	6,095	9,122	
9	466	475	9	638	647	2,897	5,462	8,359	
60	486	546	110	790	900	4,053	6,605	10,660	
447	177	624	447	1,122	1,569	5,050	6,698	11,748	
207	497	704	207	1,059	1,266	4,507	7,265	11,772	
86	1,509	1,595	86	3,468	3,555	6,668	10,617	17,285	
329	557	1,186	356	2,602	2,958	6,921	9,440	16,361	
121	655	776	121	1,890	2,011	8,538	10,029	18,567	
121	1,084	1,305	242	6,403	6,645	8,063	14,788	22,851	
114	2,061	2,175	194	6,338	6,492	7,825	15,879	23,707	

* The Dadu Canals are included in the report under Western Nara.

Canals.	Years.	CLASS OF									KHARIF.
		Rice.			Juar.			Bajri.			
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
Uchita	1886-87	...	9,368	9,368	...	...	...	93	...	93	
	1887-88	...	9,493	9,493	...	...	...	47	...	47	
	1888-89	9	9,423	9,432	...	...	...	27	...	27	
	1889-90	22	8,250	8,272	...	...	...	54	22	76	
	1890-91	20	10,248	10,268	...	...	...	83	...	83	
Canals in Tatta, &c.	1886-87	...	7,958	7,958	...	3	3	188	49	237	
	1887-88	...	6,177	6,177	4	...	4	278	44	322	
	1888-89	2	9,911	9,913	11	8	19	473	8	481	
	1889-90	...	8,165	8,166	17	45	62	375	155	530	
	1890-91	1	8,563	8,584	60	...	60	563	38	601	
Shal Canal	1886-87	...	2,181	2,181	...	...	...	...	113	113	
	1887-88	...	2,239	2,239	...	...	...	...	184	184	
	1888-89	...	2,427	2,427	...	...	...	10	97	107	
	1889-90	...	2,301	2,301	3	...	3	10	325	335	
	1890-91	...	2,435	2,435	5	...	5	30	...	30	
Pinyari	1886-87	...	51,112	51,112	210	...	210	1,741	11	1,752	
	1887-88	...	57,213	57,213	...	8	8	2,136	12	2,148	
	1888-89	4	59,497	59,503	16	10	26	2,434	54	2,488	
	1889-90	23	64,215	64,238	47	43	90	3,185	232	3,397	
	1890-91	7	61,555	61,562	28	3	31	2,485	169	2,654	
Canals in Mirpur Batoro.	1886-87	...	7,329	7,329	9	...	9	1,071	11	1,082	
	1887-88	...	7,828	7,828	2	4	6	1,700	9	1,709	
	1888-89	...	9,496	9,496	36	4	50	2,655	62	2,717	
	1889-90	...	10,451	10,451	46	25	71	3,510	533	4,043	
	1890-91	...	10,160	10,160	66	5	71	2,900	182	3,082	
Canals in Sujawal.	1886-87	...	5,178	5,178	...	...	...	491	40	531	
	1887-88	28	5,145	5,173	1	...	1	607	51	558	
	1888-89	...	5,629	5,622	...	...	...	752	25	777	
	1889-90	...	5,307	5,307	...	...	...	681	28	1,009	
	1890-91	...	6,157	6,157	...	...	...	631	4	635	
Satta	1886-87	...	4,927	4,927	18	...	18	1,585	...	1,585	
	1887-88	...	5,241	5,241	2	...	2	2,429	...	2,429	
	1888-89	...	4,682	4,682	15	2	17	2,796	1	2,797	
	1889-90	...	4,804	4,804	48	2	50	3,388	...	3,388	
	1890-91	...	5,800	5,800	6	9	15	2,805	5	2,810	
Canals in Jatti.	1886-87	...	813	813	...	...	...	136	...	136	
	1887-88	...	1,551	1,561	...	...	...	226	...	226	
	1888-89	...	1,848	1,848	...	...	...	142	...	142	
	1889-90	...	1,577	1,577	...	2	2	183	...	183	
	1890-91	...	1,622	1,622	...	...	...	234	...	234	
Khanta	1886-87	...	4,793	4,793	...	4	4	...	3	3	
	1887-88	...	4,504	4,504	...	...	...	13	...	13	
	1888-89	...	4,154	4,154	...	...	...	19	30	49	
	1889-90	...	4,280	4,280	16	...	16	54	...	54	
	1890-91	...	5,117	5,117	...	...	...	48	...	48	
Kokowari	1886-87	...	11,251	11,251	...	...	...	23	...	23	
	1887-88	...	11,512	11,512	...	...	...	...	...	...	
	1888-89	...	8,001	8,001	1	...	1	...	...	...	
	1889-90	...	11,700	11,700	...	...	...	37	...	37	
	1890-91	3	12,627	12,630	...	...	...	21	...	21	
Canals in Shahbandar.	1886-87	...	2,343	2,343	1	...	1	106	...	106	
	1887-88	...	1,126	1,126	15	...	15	86	...	86	
	1888-89	...	1,181	1,181	20	...	20	144	...	144	
	1889-90	...	1,333	1,333	...	...	...	215	...	215	
	1890-91	...	1,683	1,683	...	...	...	178	...	178	
Bunds, Bank, Left	1886-87	...	...	...	...	...	...	...	...	...	
	1887-88	...	...	...	...	...	...	...	...	...	
	1888-89	...	...	...	...	...	...	...	...	...	
	1889-90	...	...	...	...	...	...	...	...	...	
	1890-91	...	...	...	...	...	...	...	...	...	
Bunds, Bank, Right	1886-87	...	732	732	...	...	...	2	...	2	
	1887-88	...	...	...	...	...	...	...	...	...	
	1888-89	...	...	...	...	...	...	...	...	...	
	1889-90	...	...	...	...	...	...	...	...	...	
	1890-91	...	...	...	...	...	...	...	...	...	

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	...	...	218	53	271	311	9,491	9,732
...	...	...	123	41	164	170	9,534	9,704
...	...	...	277	83	360	313	9,506	9,819
...	...	...	258	219	477	334	5,491	8,825
...	...	...	279	206	485	382	10,454	10,836
...	...	...	118	45	163	306	8,035	8,361
...	...	...	93	24	117	375	6,245	6,620
...	...	...	182	92	274	668	10,019	10,687
3	...	3	157	118	275	552	8,454	9,036
...	...	...	105	125	230	729	8,746	9,475
...	1	1	8	2	10	8	2,297	2,305
...	...	...	...	27	27	...	2,450	2,450
...	4	4	...	10	10	10	2,538	2,548
...	9	9	1	15	16	14	2,650	2,664
15	...	15	1	...	1	51	2,435	2,486
4	...	4	1,058	577	1,635	3,013	51,700	54,713
...	5	5	3,897	381	4,188	5,943	57,619	63,562
2	2	4	2,288	313	2,631	4,746	59,906	64,652
4	1	5	1,321	667	1,988	4,560	65,158	69,718
7	...	7	1,223	423	1,646	3,750	62,150	65,900
10	...	10	439	399	838	1,529	7,739	9,268
1	6	7	413	247	660	2,116	8,094	10,210
7	2	9	602	241	843	3,310	9,805	13,115
4	1	5	658	482	1,140	4,218	11,492	15,710
7	1	8	360	82	442	3,333	10,430	13,763
...	...	...	91	22	113	582	5,240	5,822
...	...	...	87	23	110	623	5,519	5,842
...	...	...	82	38	120	834	5,685	6,519
...	...	...	25	6	31	1,006	5,341	6,347
...	...	...	37	1	38	668	6,162	6,880
...	...	...	245	121	366	1,848	5,048	6,896
...	...	...	469	228	697	2,900	5,469	8,369
...	...	...	620	227	847	3,431	4,912	8,343
...	...	...	462	373	835	3,898	5,179	9,077
...	...	...	257	566	823	3,068	6,380	9,448
...	...	...	33	...	33	169	813	982
...	...	...	189	...	189	415	1,551	1,966
...	...	...	48	70	118	190	1,918	2,108
...	...	...	27	6	33	210	1,555	1,795
...	...	...	34	2	36	268	1,624	1,892
...	...	...	2	106	108	2	4,906	4,908
...	...	...	41	182	223	54	4,686	4,740
...	...	...	54	282	336	73	4,466	4,539
...	...	...	71	330	401	141	4,610	4,751
...	...	...	30	114	144	78	5,291	5,309
...	...	...	79	2	81	102	11,250	11,355
...	...	...	15	16	31	15	11,528	11,543
...	...	...	8	99	107	9	8,100	8,109
...	...	...	56	217	273	93	11,917	12,010
...	...	...	64	45	109	88	12,672	12,760
...	...	...	25	1	26	132	2,344	2,476
...	...	...	24	38	62	125	1,164	1,289
...	...	...	18	31	49	182	1,212	1,394
...	...	...	30	39	69	245	1,372	1,617
...	...	...	4	39	43	182	1,722	1,904
...	...							

RABL.

CLASS OF

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	...	...	...	160	160	...	87	87
...	...	...	...	130	130	...	72	72
...	...	...	20	63	83	...	11	11
...	...	...	11	177	188	...	28	28
...	...	...	10	85	95	...	53	53
...	206	206	...	285	285	...	100	100
...	79	79	...	620	620	...	49	49
...	80	80	7	274	281	4	24	28
...	127	127	...	877	877	...	107	107
...	248	248	...	400	400	...	454	454
...	333	333	...	9	9	...	76	76
...	244	244	...	3	3	...	9	9
...	108	108	...	4	4	...	20	20
...	254	254	...	1	1	...	27	27
...	307	307	...	2	2	...	190	190
...	23	23	...	299	299	...	1,364	1,364
...	33	33	...	524	524	...	883	883
...	57	57	9	827	836	5	1,103	1,108
1	164	165	75	2,611	2,686	1	2,457	2,458
2	30	32	32	433	465	17	1,131	1,148
...	22	22	...	66	66	...	598	598
...	26	26	...	83	83	...	339	339
...	15	17	2	195	197	...	440	440
4	51	55	...	412	412	...	1,146	1,146
...	16	16	...	94	94	...	1,636	1,636
...	6	6	...	487	487	...	512	512
...	4	4	...	286	286	...	257	257
...	6	6	...	212	212	2	48	50
...	4	4	1	888	889	...	509	509
...	1	1	...	159	159	...	275	275
...	...	...	...	26	26	...	20	20
...	...	...	...	34	34	...	...	...
...	...	...	8	99	107	...	62	62
...	...	...	...	249	249	...	44	44
...	...	...	...	245	245	...	116	116
...	...	...	...	140	140	...	131	131
...	...	...	...	119	149	...	90	90
...	...	...	...	12	12	...	...	...
...	...	...	...	199	199	...	49	49
...	...	...	...	302	302	...	257	257
...	...	...	...	6	6	...	23	23
...	...	...	...	13	13	...	...	...
...	...	...	...	63	63	...	30	30
...	...	...	...	221	221	...	31	31
...	...	...	...	59	59	...	35	35
...	...	...	2	19	21	...	27	27
...	...	...	...	23	23	...	27	27
...	...	...	...	2	2	...	6	6
...	...	...	...	43	43	...	24	24
...	...	...	...	62	62	...	111	111
...	...	...	...	16	16	...	13	13
...	...	...	...	8	8	...	...	...
...	...	...	...	23	23	...	10	10
...	...	...	...	1	1	...	39	39
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	46	46	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...

Note.—This statement has been prepared from figures furnished by the
of Revenue of Report. A correct statement

RETURN.—concluded.

Crops.						Total Cultivation.			REMARKS
Other Crops.			Total Rabi.			Lift.	Flow.	Total.	
Lift.	Flow.	Total.	Lift.	Flow.	Total.				
...	763	763	...	1,010	1,010	311	10,431	10,742	
51	570	621	51	772	823	221	10,306	10,527	
61	361	422	81	435	516	394	9,941	10,335	
84	705	789	95	910	1,005	429	9,401	9,830	
83	949	1,032	92	1,087	1,180	475	11,541	12,016	
...	550	550	...	1,141	1,141	306	9,196	9,502	
...	193	198	...	946	946	375	7,191	7,566	
52	246	298	63	624	687	731	10,643	11,374	
21	312	333	21	1,423	1,444	573	9,907	10,480	
48	407	455	48	1,509	1,557	777	10,255	11,032	
...	91	91	...	509	509	8	2,806	2,814	
...	87	87	...	343	343	...	2,793	2,793	
...	332	332	...	473	473	10	3,011	3,021	
4	15	19	4	297	301	18	2,947	2,965	
83	75	158	83	574	657	134	3,009	3,143	
11	473	484	11	2,159	2,170	3,024	53,859	56,883	
...	640	640	...	2,080	2,080	5,943	59,699	65,642	
127	148	275	141	2,135	2,276	4,887	62,041	66,928	
158	2,763	2,921	235	7,995	8,230	4,795	73,153	77,948	
77	826	903	128	2,420	2,548	3,878	64,570	68,448	
...	114	114	...	800	800	1,529	8,539	10,068	
...	187	187	...	635	635	2,716	8,729	10,445	
...	129	129	4	779	783	3,314	10,554	13,898	
...	420	420	4	2,029	2,033	4,222	13,521	17,743	
...	659	659	...	2,405	2,405	3,333	12,835	16,168	
...	45	45	...	1,050	1,050	582	6,290	6,872	
...	63	63	...	610	610	623	5,829	6,452	
...	81	81	2	347	349	836	6,032	6,868	
2	110	112	3	1,511	1,514	1,009	6,852	7,861	
1	55	56	1	490	491	669	6,652	7,321	
11	88	99	11	134	145	1,859	5,182	7,041	
21	64	85	21	98	119	2,921	5,567	8,488	
10	36	46	18	197	215	3,449	5,109	8,558	
9	164	173	9	457	466	3,907	5,636	9,543	
157	340	497	157	701	858	3,225	7,081	10,306	
...	35	35	...	306	306	169	1,119	1,288	
...	58	58	...	267	267	415	1,818	2,233	
1	1	2	1	13	14	191	1,931	2,122	
...	8	8	...	256	256	210	1,841	2,051	
...	13	13	...	572	572	268	2,196	2,464	
...	63	63	...	92	92	2	4,998	5,000	
...	50	50	...	63	63	54	4,749	4,803	
...	...	...	...	93	93	73	4,559	4,632	
...	...	...	...	252	252	141	4,862	5,003	
...	12	12	...	106	106	78	5,337	5,415	
...	394	394	2	440	449	104	11,688	11,797	
...	184	184	...	234	234	15	11,762	11,777	
...	94	94	...	102	102	9	8,202	8,211	
...	268	268	...	335	335	93	12,252	12,345	
...	494	494	...	667	667	88	13,339	13,427	
...	36	36	...	65	65	132	2,409	2,541	
...	24	24	...	32	32	125	1,196	1,321	
...	2	2	...	12	12	182	1,224	1,406	
...	44	44	...	77	77	245	1,449	1,594	
...	83	83	...	123	123	182	1,845	2,027	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	3	3	...	49	49	9	781 ₉	790	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	

Revenue Department. In some cases the totals will not agree with those recorded in Table VII will be furnished with next Report.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Name of Canal.	1886-87.			1887-88.		
	Lift.	Flow.	Total.	Lift.	Flow.	Total.
<i>Begari Canals District.</i>						
Desert Canal	2,431	37,137	39,568	3,224	46,883	50,107
Unharwah	2,453	21,839	24,322	2,936	26,470	29,406
Begari Canal	11,025	124,041	135,066	18,391	107,846	126,237
Kashmor Bund	25	5,244	5,269	5	3,835	3,840
Total ...	15,964	189,261	204,225	24,556	185,034	209,590
<i>Shikarpur Canals District.</i>						
Canals in Rohri	13,079	52,519	65,598	17,442	59,192	76,634
Bunds in Rohri ... ..	.....	.....	.....	.....	.....	.....
Sind Canal	6,679	46,346	53,025	12,554	36,358	48,912
Total ...	19,758	98,865	118,623	29,996	95,550	125,546
<i>Ghár Canals District.</i>						
Sukkur Canal	7,419	58,785	66,204	12,408	58,318	70,721
Ghár Canal	3,198	167,102	170,300	8,023	154,937	162,960
Bunds, Right Bank ... ..	.....	87	87	.....	113	113
Total ...	10,617	225,974	236,591	20,426	213,368	233,794
<i>Western Nára District.</i>						
Western Nára	25,227	170,638	195,865	27,449	155,516	182,965
Wahar	1,454	5,482	6,936	2,044	4,475	6,519
Marvi	2,265	1,551	3,816	2,611	1,078	3,689
Phitta	3,288	1,584	4,872	2,220	3,062	5,282
Total ...	32,234	179,255	211,489	34,324	164,244	198,568
<i>Eastern Nára District.</i>						
Nára Supply Channel	655	1,028	1,683	957	1,505	2,462
Eastern Nára	230	18,208	18,438	294	24,466	24,760
Mithrao Canal	12,745	74,961	87,706	15,343	89,649	104,992
Dimwah	1,793	476	2,269	1,898	973	2,871
Heranwah	499	204	703	957	618	1,575
Khigra Canal ... ..	.....	.....	.....	.....	.....	.....
Thar Canal	304	22,085	22,389	530	31,255	31,785
Total ...	16,226	116,962	133,188	19,679	148,466	168,145
<i>Hyderabad Canals District.</i>						
Mehrabwah	11,148	710	11,858	11,542	1,190	12,732
Nasrat	14,059	3,548	17,607	12,028	6,739	18,767
Naolákhi	34,420	11,598	46,018	36,541	12,312	48,853
Dambro	6,355	517	6,872	6,651	477	7,128
Dandwah	14,630	6,007	20,637	16,602	6,049	22,651
Renwah	17,695	1,498	19,193	14,590	408	14,998
Alibhar Kecheri	6,408	70	6,478	5,661	68	5,729
Márák	34,984	1,311	36,295	34,221	1,487	35,708
Gháro Mahmuda	43,221	2,894	46,115	42,404	2,619	45,023
Kari Shumáli	27,666	640	28,306	28,155	449	28,604
Nasir	25,154	576	25,730	25,718	713	26,431
Sarfráz	18,523	918	19,441	17,289	715	18,004
Other Canals	22,441	2,582	25,023	20,497	2,579	23,076
Total ...	276,704	32,869	309,573	271,899	35,805	307,704
<i>Fuleli Canals District.</i>						
Fuleli Canals	59,038	140,119	199,157	62,703	157,837	220,540
Other Canals	5,466	9,643	15,109	6,324	10,196	16,520
Total ...	64,504	149,762	214,266	69,027	168,033	237,060
<i>Karachi Canals District.</i>						
Other Canals North of Kotri ...	9,369	4,016	13,385	9,396	4,958	14,354
Kalri	3,027	6,095	9,122	2,897	5,462	8,359
Baghar	6,668	10,617	17,285	6,921	9,440	16,361
Uchita	311	10,431	10,742	221	10,306	10,527
Canals in Tatta, &c.	306	9,196	9,502	375	7,191	7,566
Shal Canals	8	2,806	2,814	.....	2,793	2,793
Pinyári	3,024	53,859	56,883	5,943	59,699	65,642
Canals in Mirpur Batoro	1,529	8,539	10,068	2,116	8,729	10,845
Canals in Sujáwal	582	6,290	6,872	623	5,829	6,452
Satta	1,859	5,182	7,041	2,921	5,567	8,488
Cauals in Jatti	169	1,119	1,288	415	1,818	2,233
Khanta	2	4,998	5,000	54	4,749	4,803
Kokowari	104	11,693	11,797	15	11,762	11,777
Canals in Sheshbandar	132	2,409	2,541	125	1,196	1,321
Bunds, Left Bank ... ..	.....	.....	.....	.....	.....	.....
Bunds, Right Bank	9	781	790	.....	.....	.....
Total ...	27,099	138,031	165,130	32,022	139,499	171,521

TRACT.

1888-89.			1889-90.			1890-91.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
3,744	65,458	69,202	6,088	76,844	82,932	8,310	73,358	81,668
4,207	39,769	43,976	5,398	28,477	33,875	3,250	17,410	20,660
26,405	136,859	163,264	23,652	117,881	141,533	20,471	97,767	118,238
6	3,620	3,626	9	5,501	5,510	4	4,555	4,559
34,362	245,706	280,068	35,147	228,703	263,850	32,065	193,090	225,155
23,332	58,746	82,078	16,415	56,283	72,698	8,071	51,532	59,603
.....								
12,385	42,670	55,055	13,638	50,007	63,645	13,780	47,958	61,738
35,717	10,416	137,133	30,053	106,290	136,343	21,851	99,490	121,341
18,141	64,532	82,673	16,561	73,136	89,697	11,499	73,855	85,354
5,355	199,033	204,388	4,108	223,447	227,555	3,959	229,037	232,996
.....	55	55	.....	.....	.....	.....	.....	.....
23,496	265,620	287,116	20,669	296,583	317,252	15,458	302,892	318,350
32,437	154,797	187,234	36,774	185,309	222,083	44,823	144,183	189,006
2,195	3,971	6,166	1,681	5,045	6,727	1,488	4,698	6,184
2,985	1,117	4,102	3,132	1,006	4,138	1,962	2,112	4,136
4,161	554	4,715	4,051	1,481	5,532	4,751	2,240	6,991
41,778	160,494	202,272	45,638	192,842	238,480	53,024	153,293	206,317
1,295	1,743	3,038	503	6,220	6,723	191	5,632	6,066
657	37,650	38,307	886	84,888	85,774	725	49,366	5,043
24,066	97,773	121,839	31,546	90,625	122,171	37,861	72,715	119,591
1,739	1,410	5,373	3,949	9,327	4,949	2,323	7,272	6,184
1,487	1,013	2,500	1,675	7,69	2,444	1,566	784	2,340
.....								
1,792	43,075	44,867	581	5,541	6,122	325	8,948	9,273
.....								
31,036	182,664	213,700	46,529	234,804	281,333	51,417	171,955	223,372
13,069	1,031	14,100	13,173	1,629	14,802	11,992	1,018	13,010
16,034	6,604	22,638	17,026	8,645	25,671	15,525	7,939	23,464
38,546	12,512	51,058	38,832	13,920	52,752	33,808	14,694	48,502
6,674	775	7,449	8,677	9,506	9,592	9,592	1,307	10,739
13,081	6,244	24,925	19,658	6,708	26,366	19,048	7,586	26,612
13,410	423	13,833	13,192	958	14,150	15,527	1,450	16,977
5,892	66	5,958	8,832	66	8,898	7,901	155	8,056
39,347	1,397	40,744	44,492	1,405	45,897	40,269	1,878	42,247
46,589	2,350	48,939	50,557	4,645	55,202	52,042	5,424	57,466
33,856	560	34,416	35,319	739	36,076	32,596	1,163	33,739
27,390	471	27,870	27,441	767	28,208	27,734	1,525	29,239
18,691	839	19,530	19,407	1,349	20,756	20,669	1,929	22,589
20,446	2,455	22,901	23,241	3,696	26,937	21,577	4,985	*26,562
2,98,634	35,737	334,371	319,847	45,376	365,223	308,218	51,024	359,242
73,304	161,273	234,577	86,047	181,685	267,732	88,497	189,037	277,534
7,456	10,461	17,917	12,826	18,358	31,184	6,892	11,747	18,549
80,760	171,734	252,494	98,873	200,043	298,916	95,299	200,784	296,083
10,503	3,907	14,410	11,454	6,316	17,770	8,086	9,947	*18,033
4,055	6,605	10,660	5,059	9,698	11,748	4,507	7,265	*11,772
8,838	10,029	18,867	8,963	14,738	22,831	7,828	15,879	23,707
394	9,941	10,335	429	9,401	9,830	475	11,541	12,016
731	10,643	11,374	573	9,907	10,480	777	10,255	11,032
10	3,011	3,021	18	2,947	2,965	134	3,009	3,143
4,887	62,041	66,928	4,795	73,153	77,948	3,878	64,570	68,448
3,314	10,584	13,898	4,222	13,521	17,743	3,333	12,835	16,168
836	6,032	6,868	1,009	6,852	7,861	669	6,652	7,321
3,449	5,109	8,558	3,907	5,636	9,543	3,225	7,081	10,306
191	1,931	2,122	210	1,841	2,051	268	2,196	2,464
73	4,559	4,632	141	4,862	5,003	78	5,337	5,415
9	8,202	8,211	93	12,252	12,345	83	13,339	13,427
182	1,224	1,406	245	1,449	1,694	182	1,845	2,027
.....								
.....								
37,472	143,818	181,290	40,209	169,623	209,832	35,528	171,751	205,279

* Shown in the report as 26,572. † Includes Didd Canal: shown in the report under Western Nara. ‡ Shown in the report as 11,760.

H. M. THOMPSON, M.Inst. C.E.,
Superintending Engineer in Sind.

TABLE IX.

Rainfall in the Province of Sind for 1890-91.

Collectorates and Districts.			April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.
1			2	3	4	5	6	7	8	9	10	11	12	13	14
			In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.
UPPER SIND FRONTIER.	Begāri Canals.	Jacobabad	0 6	...	...	1 59	0 49	...	...	2 50	1 17	0 40	0 64	0 18	7 3
		Kashmor	0 10	...	...	0 6	0 71	...	...	0 88	1 18	0 34	0 39	0 04	3 70
		Thul	0 19	...	...	0 80	1 12	...	...	0 90	0 53	1 19	0 91	0 11	5 75
		Shahdādpur	0 9	...	...	0 80	0 72	...	...	1 83	2 17	0 52	0 92	0 05	7 11
SHIKĀRPUR COLLECTORATE.	Shikārpur Canals.	Ubāro	...	...	...	0 62	0 21	...	...	1 70	1 21	0 10	0 48	0 22	4 54
		Mirpur	...	...	...	1 46	2 67	...	...	1 79	2 4	0 16	0 26	0 20	8 58
		Ghotki	0 1	...	...	2 94	1 19	...	...	1 62	1 12	0 34	0 37	0 38	7 97
		Rohri	...	...	...	1 99	5 11	...	...	2 29	1 24	0 22	0 12	0 31	11 28
		Shikārpur	0 3	...	...	1 15	4 5	...	...	2 72	0 96	0 36	0 54	0 32	10 13
	Ghār Canals.	Sukkur	...	...	...	2 0	7 23	...	...	2 31	1 77	0 29	0 16	0 18	14 94
		Garhi Yasin	...	...	...	8 14	4 13	...	...	2 50	1 45	0 35	0 55	0 39	12 51
		Rato-doro	0 17	...	...	2 28	3 67	...	...	0 86	1 6	0 36	0 34	0 25	8 99
		Larkhāna	...	...	...	0 43	2 9	...	...	2 11	0 91	0 20	0 21	0 05	6 00
		Kambar	0 10	...	...	0 53	3 74	...	...	0 66	1 25	0 18	0 26	0 15	6 87
		Bakrāni	...	...	...	0 27	2 16	...	...	2 18	1 86	...	0 16	...	6 83
		Mehar	...	...	...	0 24	1 12	...	...	0 82	1 2	0 48	0 20	0 07	3 95
		Warah	...	...	...	2 45	2 16	...	...	1 87	2 62	0 24	...	0 12	9 46
		Khairpur Nātheshāh	...	...	...	...	1 30	...	...	1 76	1 52	0 50	0 11	0 17	5 36
	Eastern Nāra Canals.	Nagar	0 10	1 30	0 30	3 20	3 89	0 10	...	0 5	0 20	0 14	...	...	9 28
		Umārkot	0 2	...	0 72	4 52	1 48	0 10	...	0 90	0 81	0 28	...	0 31	9 12
		Kipra	0 3	...	0 4	5 5	2 37	...	...	0 98	0 40	0 15	...	0 27	10 29
HYDERABAD COLLECTORATE.	Hyderabad Canals.	Kandiāro	...	...	...	1 60	1 39	...	...	2 43	1 22	0 70	...	...	7 54
		Naussharo	...	...	...	0 52	0 89	...	...	2 17	1 23	0 62	...	0 13	5 56
		Thāru Shāh	...	...	...	1 43	1 52	...	...	2 14	1 30	0 46	...	0 07	6 92
		Moro	0 6	...	...	0 53	0 66	...	...	1 74	1 36	0 54	...	0 21	5 10
		Hāla	...	...	...	0 86	1 81	...	...	3 10	0 40	0 55	...	0 20	6 92
	Tando Canals.	Sakrand	...	...	...	0 53	0 66	...	...	1 74	1 36	0 54	...	0 21	5 10
		Shahdādpur	0 35	...	0 32	2 54	4 76	...	...	3 34	0 30	0 52	...	0 43	12 56
		Tando Adam	0 1	...	...	2 97	3 62	...	...	0 75	0 10	0 20	...	...	7 65
		Tando Alahyār	...	...	0 6	2 17	5 23	...	...	1 76	0 20	0 56	...	0 31	10 23
		Mirpur Khās	0 36	...	1 15	1 84	4 39	...	...	1 44	0 22	0 95	...	0 60	10 0
	Fuleli Canals.	Hyderabad	...	...	1 60	1 87	2 54	...	...	1 53	0 61	0 57	...	0 11	8 83
		Dero Mohbat	...	...	1 70	3 75	8 90	...	...	1 0	0 80	0 40	...	...	16 55
		Tando Bāgo	...	...	1 49	1 28	2 30	...	...	2 68	1 9	0 47	...	0 10	9 41
		Badin	...	...	3 40	1 61	1 94	...	...	1 69	2 13	0 50	...	...	11 27
		Tando Muham-mad Khān	...	...	1 90	3 75	7 76	...	...	0 62	1 75	0 40	...	0 22	16 40
KARACHI COLLECTORATE.	Karachi Canals.	Dādū	...	...	...	0 32	0 13	...	...	1 84	1 32	0 67	...	0 47	4 75
		Johi	0 3	...	...	1 20	0 26	...	...	1 97	1 43	1 7	0 10	0 78	6 84
		Sohwan	0 1	...	...	0 90	0 24	...	...	1 89	0 68	0 97	...	0 59	5 18
		Manjhānd	...	...	...	1 29	3 51	...	...	2 66	0 50	0 37	...	0 73	2 06
		Kotri	...	...	1 56	1 24	6 80	...	...	1 83	0 88	0 48	...	0 17	12 96
	Mirpur Bātoro Canals.	Bula Khān's Tando	...	...	0 1	2 25	4 57	...	...	4 37	1 4	0 48	...	0 26	12 98
		Jerruck	...	...	1 98	1 5	4 40	...	...	1 77	1 12	0 48	...	0 10	10 90
		Sakro	...	...	0 80	2 31	1 98	...	...	4 4	1 37	0 54	...	0 34	11 38
		Mirpur Bātoro	...	...	0 20	1 30	2 33	...	...	4 22	1 49	0 70	...	0 78	11 02
		Sujāwal	...	...	3 46	0 70	2 4	...	...	1 75	1 74	0 60	...	0 13	10 42
	Mughalbin Canals.	Shāhbāndar	...	...	0 50	2 14	1 7	...	...	2 32	2 58	0 71	...	...	9 32
		Kotri, Ghorābāri	...	...	0 3	2 7	2 4	...	...	3 5	0 91	0 85	...	0 12	9 07
		Koti	...	...	0 50	1 55	2 58	...	...	2 60	0 54	0 91	...	0 33	9 01
		Mughalbin	...	...	0 49	3 3	2 37	...	...	3 48	2 40	1 94	...	0 63	14 34
		Karachi	...	...	1 0	4 15	1 59	...	...	0 70	0 71	0 77	...	0 10	9 02
			...	...	...	1 65	8 63	...	...	5 17	1 75	0 96	...	0 14	13 30

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Memorandum showing the amount of Loss to Canals on account of difference between Assessments of Water-rates on Jaghir Lands in Land and foreign lands in Khelat and Assessments at the ordinary rates in force for Government Lands.

	To end of 1888-90.	During 1890-91.	To end of 1890-91.	Remarks.
Rs.	Rs.	Rs.		
MAJOR WORKS.				
<i>Productive Works.</i>				
Desert Canal	2,22,365	*35,048	2,57,413	*Including Rs. 34,199 on account of Khelat. Do. Rs. 16,798. do.
Begári Canal	3,33,980	+28,450	3,62,439	
Eastern Nára Works	38,796	11,948	50,744	
Total ...	5,95,150	75,446	6,70,596	
MINOR WORKS AND NAVIGATION.				
<i>Works for which Capital and Revenue Accounts are kept.</i>				
Sukkur Canal	28,353	5,266	33,619	
Ghár Canal	1,48,014	61,583	2,09,597	
Mehrabwáh	1,869	588	2,457	
Alibhar Kacheri Canal	23,594	2,781	26,375	
Márak Great Canal	1,28,900	15,512	1,44,412	
Sarfrazwáh	65,402	8,221	73,623	
Fuleli Canal	11,09,359	1,29,010	12,38,369	
Total ...	15,05,491	2,22,961	17,28,452	
<i>Works for which only Revenue Accounts are kept.</i>				
Under Executive Engineer, Shikárpur Canals ...	...	34,511	...	
" " Western Nára do. ...	...	53,346	...	
" " Hyderabad do. ...	...	79,044	...	
" " Fuleli do. ...	...	4,602	...	
" " Karáchi do. ...	...	19,440	...	
Total ...	...	1,90,943	...	

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. I-B.

Capital Account of Irrigation Works in Sind for and to end of 1890-91.

Name of Work.	DURING YEAR.										TO END OF YEAR.									
	Direct Charges.					Indirect Charges.					Direct Charges.					Indirect Charges.				
	Works.	Establish- ment.	Tools and Plant.	Total.	Deduct Receipts on Capital Account.	Total.	Capita- lization.	Leave and Allow- ances.	Total.	Grand Total.	Works.	Establish- ment.	Tools and Plant.	Total.	Deduct Receipts on Cap- ital Ac- count.	Total.	Capita- lization.	Leave and Pensions Allow- ances.	Total.	Grand Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
PRODUCTIVE WORKS.																				
In Operation.																				
1 Desert Canal	...	...	...	...	...	...	...	...	...	...	9,82,895	2,19,876	14,280	12,17,051	37	12,17,014	...	40,507	40,507	12,57,521
2 Unharwah	...	...	...	...	...	...	...	...	...	...	2,79,267	52,087	481	3,31,835	...	3,31,835	...	7,293	7,293	3,39,128
3 Begari Canal	...	...	...	...	...	...	...	...	...	...	13,91,068	2,29,894	4,666	16,25,628	19	16,25,609	4,246	43,224	47,470	16,73,079
4 Eastern Nara Works.	63,661	14,698	1,028	79,387	...	79,387	...	...	2,058	81,445	40,75,664	10,11,471	43,692	51,30,827	176	51,30,651	2,669	1,86,699	1,88,368	53,19,019
Total Major Works...	63,661	14,698	1,028	79,387	...	79,387	...	...	2,058	81,445	67,28,894	15,13,328	63,119	83,05,341	232	83,05,109	6,915	2,76,723	2,83,638	85,88,747
MINOR WORKS AND NAVIGATION																				
In Operation.																				
5 Sukkur Canal	...	...	...	...	...	...	...	...	...	...	1,10,106	2,05,471	13,330	13,28,907	160	13,28,747	19,775	40,191	59,966	13,88,713
6 Ghor Canal	...	...	...	...	...	...	...	...	...	...	3,38,237	75,554	1,746	4,15,537	...	4,15,537	10,329	15,111	25,440	4,40,977
7 Mehrabwah	...	...	...	...	...	...	...	...	...	...	52,797	13,199	22	66,018	...	66,018	...	1,851	1,851	67,869
8 Alibhar Kachori Canal	...	...	...	...	...	...	...	...	...	...	19,636	3,548	23	23,207	...	23,207	...	710	710	23,917
9 Marak Great Canal	...	...	...	...	...	...	...	...	...	...	1,59,516	32,719	1,445	1,93,680	...	1,93,680	1,409	6,544	7,953	2,01,633
10 Sadraizwah	...	...	...	...	...	...	...	...	...	...	1,03,432	15,697	30	1,18,559	...	1,18,559	3,102	3,019	6,121	1,24,680
11 Fueli Canal...	17,474	3,495	...	20,969	...	20,969	...	489	...	21,458	5,81,307	1,79,388	651	10,61,736	...	10,61,715	6,401	34,648	41,049	11,02,824
Total Minor Works and Navigation ...	17,474	3,495	...	20,969	...	20,969	...	489	...	21,458	26,65,931	5,25,426	17,247	32,07,704	261	32,07,443	41,016	1,02,074	1,43,090	33,50,533
Grand Total ...	81,133	18,193	1,028	1,00,356	...	1,00,356	...	2,547	...	1,02,903	33,93,925	20,38,754	80,366	1,15,13,045	493	1,15,12,552	47,931	3,78,797	4,26,728	1,19,39,280

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Statement showing the Financial Results of Irrigation Works in Sind for the year 1890-91, based on actual Receipts.
Principal Results of Operations for the year ended 31st March 1891.

Irrigation Works.	1	2	3	4	5	6	SURPLUS REVENUE AFTER PAYING INTEREST ON DIRECT CAPITAL OUTLAY.		EXCESS CHARGES, INCLUDING INTEREST ON DIRECT CAPITAL OUTLAY.	
							Amount.	Percentage on total sum at charge.	Amount.	Percentage on total sum at charge.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
MAJOR WORKS.										
PRODUCTIVE WORKS.										
<i>In Operation.</i>										
1	Desert Canal	12,57,521	1,70,755	52,553	1,18,202	48,681	69,521	15.35	.....	...
2	Unharwah	3,39,128	45,729	16,052	29,677	13,273	16,404	6.78	.....	...
3	Begari Canal	16,73,079	2,38,437	83,540	1,55,197	66,024	90,173	21.46	.....	...
4	Eastern Nara Works	53,19,019	4,55,789	1,42,151	3,13,638	2,03,638	1,10,000	1.85	.....	...
	Total Major Works	85,88,747	9,10,710	2,93,996	6,16,714	3,30,616	2,86,098	4.05	.....	...
MINOR WORKS AND NAVIGATION.										
<i>In Operation.</i>										
5	Sukkur Canal	13,88,713	1,41,086	37,981	1,03,105	53,150	49,955	2.25	.....	...
6	Ghar Canal	4,40,977	5,92,845	1,71,825	4,31,220	16,621	4,04,599	* .....	.....	...
7	Mehrabwah	67,869	24,357	13,731	10,626	2,641	7,985	21.85	.....	...
8	Alibhar Kacheri Canal	23,917	8,478	5,449	3,029	928	2,101	4.87	.....	...
9	Mirak Great Canal	2,01,553	59,378	42,529	16,849	7,744	9,105	* .....	.....	...
10	Surfrazwah	1,24,680	29,840	23,000	6,840	4,742	2,098	1.19	.....	...
11	Fulali Canal	11,02,324	4,87,239	2,60,563	2,26,676	42,052	1,84,624	58.13	.....	...
	Total Minor Works and Navigation	33,50,533	13,43,293	5,54,878	7,88,345	1,27,878	6,60,467	* .....	.....	...
	Grand Total	1,19,39,280	22,53,933	8,48,874	14,05,059	4,58,494	9,46,565	52.25	.....	...

* The total sum at charge being minus, no percentage can be calculated.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. III.C.

Demands and Realizations during the year 1890-91 in Sind.

Irrigation Works.	Balance of Demands at commencement of year.	DEMANDS OF THE YEAR.				Total including Balance at commencement of year.	Deduct Remissions, including Cash Refunds.	Net Total.	Deduct amount unrealized at close of year.	Actual Realizations of the year.
		Khairi, 1890-91.*	Rabi, 1890-91.*	Miscellaneous Receipts.	Total.					
1	2	3	4	5	6	7	8	9	10	11
MAJOR WORKS.										
<i>Productive Works.</i>										
1 Desert Canal ...	4,222	41,603	1,304	257	43,164	47,386	...	47,386	19,856	28,030
2 Unharwah ...	...	...	...	27	27	27	...	27	...	27
3 Begari Canal ...	8,981	23,073	605	314	23,992	32,973	...	32,973	4,618	28,355
4 Eastern Nara Works ...	+ 1,207	880	1,197	18,783	20,869	22,076	...	22,076	17	22,059
Total Major Works ...	14,410	65,565	3,106	19,381	88,052	1,02,462	...	1,02,462	23,991	78,471
MINOR WORKS AND NAVIGATION.										
5 Sakkur Canal...	905	823	178	1,152	2,153	3,058	...	3,058	705	2,353
6 Ghar do. ...	1,120	2,556	2,655	5,638	10,949	11,969	...	11,969	39	11,930
7 Mohrabwah ...	...	1	1	62	64	64	...	64	...	64
8 Alibhar Kachori Canal ...	1	332	...	12	404	405	...	...	13	392
9 Marak Great Canal ...	267	2,388	36	104	2,528	2,795	...	2,795	234	2,561
10 Surfrazwah ...	-59	1,650	49	336	2,035	1,976	...	1,976	648	1,328
11 Fuleli Canal ...	3,244	21,937	1,868	3,830	27,635	30,879	...	30,879	4,213	26,666
Total Minor Works and Navigation ...	5,478	29,747	4,787	11,134	45,668	51,146	...	51,146	5,852	45,294
Grand Total ...	19,888	95,312	7,893	30,515	1,33,720	1,53,608	...	1,53,608	29,843	1,23,765

* Current balance—vide Canal Return No. IX. for 1890-91 received from the Deputy Commissioner, Thar and Parkar.

* Revenue year.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. IV-C.

Statement showing the Financial Results of Irrigation Works in Sind for the year 1890-91 based on the Assessments of the year.
Principal Results and Operations for the year ended 31st March 1891.

REVENUE ASSESSED DURING THE YEAR.													
Irrigation Works.	Capital Outlay (Direct and Indirect) to end of year.	Direct assessed Revenue.							Indirect Revenue— (Land Revenue due to operation of Canals).†	Grand Total.	Working Expenses— direct and indirect.	Net assessed Revenue of the year.	Percentage on Capital Outlay to end of year.
		Occupier's rate.	Owner's rate.	Plan- tations.	Water- power.	Navi- ga- tion.	Miscel- laneous.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAJOR WORKS.													
Productive Works.													
1													
2													
3													
4													
					</								

* The assessments by the Civil Department are for revenue year 1890-91.

† Including 4 per cent. on ⁹/₁₀ this proceeds from sale of occupancy rights in lands to end of 1890-91.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT.



General Abstract of Financial Results of Irrigation

		WORKS IN									
		MAJOR WORKS—PRODUCTIVE WORKS.					MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL				
		Desert Canal.	Unharwah.	Begāri Canal.	Eastern Nāra Works.	Total.	Sukkur Canal.	Ghār Canal.	Mehrabwah.	Ajibhar Kacheri Canal.	Mārak Great Canal.
<i>Capital Outlay.</i>		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
During year	Direct	...	...	...	79,387	79,387	...	.....	...	...	...
	Indirect	...	...	...	2,058	2,058	...	...	...	...	...
	Total	...	...	...	81,445	81,445	...	.....	...	...	...
To end of year	Direct	12,17,014	3,31,835	16,25,609	45,13,651	83,05,109	13,28,747	4,15,537	66,018	23,207	1,03,600
	Indirect	40,507	7,293	47,470	1,88,368	2,83,638	59,966	25,440	1,851	710	7,953
	Total	12,57,521	3,39,128	16,73,079	53,19,019	85,88,747	13,88,713	4,40,977	67,869	23,917	2,01,553
<i>Gross Revenue.</i>											
During year	Direct	28,030	27	28,355	22,059	78,471	2,353	11,930	64	392	2,561
	Indirect	1,42,725	45,702	2,10,082	4,33,730	8,32,239	1,38,733	5,80,915	24,293	8,086	56,817
	Total	1,70,755	45,729	2,38,437	4,55,789	9,10,710	1,41,086	5,92,845	24,357	8,478	59,378
To end of year	Direct	3,18,227	170	3,64,177	5,99,309	12,81,883	18,944	2,10,908	1,238	11,714	54,809
	Indirect	*17,60,366	2,90,749	42,50,439	56,17,894	1,19,19,448	12,31,136	1,25,59,554	1,79,487	1,11,836	8,69,676
	Total	20,78,593	2,90,919	46,14,616	62,17,203	1,32,01,331	12,50,080	1,27,70,462	1,80,725	1,23,550	9,24,485
<i>Working Expenses.</i>											
During year	Direct	51,344	15,724	81,372	1,38,572	2,87,012	37,437	1,68,994	13,466	5,341	41,663
	Indirect	1,209	328	1,868	3,579	6,984	544	2,631	265	108	866
	Total	52,553	16,052	83,240	1,42,151	2,93,996	37,981	1,71,625	13,731	5,449	42,529
To end of year	Direct	5,80,448	97,051	20,66,502	27,21,775	54,65,776	9,11,724	36,44,694	1,17,082	1,20,939	3,38,774
	Indirect	16,188	2,108	54,816	1,16,975	1,90,087	25,771	83,968	2,546	3,393	8,608
	Total	5,96,636	99,159	21,21,318	28,38,750	56,55,863	9,37,495	37,28,662	1,19,598	1,24,332	3,47,382
<i>Net Revenue.</i>											
During year		1,18,202	29,677	1,55,197	3,13,638	6,16,714	1,03,105	4,21,220	10,628	3,029	16,849
To end of year		14,81,957	1,91,760	24,93,298	33,78,453	75,45,468	3,12,585	90,41,800	61,127	—782	5,77,103
<i>Simple Interest.</i>											
During year		48,681	13,273	65,024	2,03,638	3,30,616	...	...	...	...	...
To end of year		6,07,757	78,298	11,50,217	38,90,722	57,26,994	...	.....	...	...	...
<i>Net profit after paying off Interest.</i>											
During year		69,521	16,404	90,173	1,10,000	2,86,098	...	.....	...	...	...
To end of year		8,74,200	1,13,462	13,43,081	—5,12,269	18,18,474	...	.....	...	...	...

* Including Rs. 3 on account

† Rs. 2 adjusted on account

Note.—Refunds of revenue are deducted from direct gross revenue and not added to the

Works in Sind for and up to the close of 1890-91.

OPERATION.

AND REVENUE ACCOUNTS ARE KEPT.			MINOR WORKS AND NAVIGATION—WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.							Expenditure on all these works for the year ending 31st October 1891.	
Surfraz-wah.	Fuleli Canal.	Total.	Grand Total.	Under Executive Engineer, Sukkur Canal.	Under Executive Engineer, Western Nara Canal.	Under Executive Engineer, Hyderabad Canal.	Under Executive Engineer, Feroz Canal.	Under Executive Engineer, Kara-chi Canal.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
...	20,969	20,969	1,00,356.	...	...	...	...	...	...	BEGA'RI CANALS.	
...	489	489	2,547	...	...	...	...	...	...	Kashmir Bund.	
...	21,458	21,458	1,02,903	...	...	...	...	...	...	Maintenance and repairs to Bund ...	23,128
1,18,559	10,61,775	32,07,443	1,15,12,552	...	...	...	...	...	...	Rent of Telegraph at Badin ...	1,800
6,121	41,049	1,43,090	4,26,728	...	...	...	...	...	...	Constructing a new loop. Surveying a new canal in the Upper Sind Frontier. General charges for Establishment and Tools and Plant ...	72,531
1,24,680	11,02,824	33,50,533	1,19,39,280	...	...	...	...	...	...	Share of irrigation charges in the Civil Department. Direct Receipts ...	1,036
...	...	...	...	...	...	...	...	...	...	Irrigation share of Land Revenue ...	28,097
1,328	26,666	45,294	1,23,765	7,217	20,130	13,694	919	9,627	51,587	Total Begari Canals ...	831
28,512	4,60,573	12,97,929	21,30,168	3,41,520	5,87,032	5,84,636	45,709	4,22,667	19,81,564	...	447
29,840	4,87,239	13,43,223	22,53,933	3,49,737	6,07,162	5,98,330	46,628	4,32,294	20,33,151	SHIKARPUR CANALS.	
35,291	6,23,707	9,56,611	22,38,494	...	...	...	...	...	...	Sukkur-Begari Bund—Improvements and maintenance and repairs ...	28,816
2,51,280	62,60,921	2,14,63,890	3,33,83,338	...	...	...	...	...	...	Kashmir Bund—Maintenance and repairs ...	1,508
2,86,571	68,84,628	2,24,20,501	3,56,21,832	...	...	...	...	...	...	General charges for Establishment and Tools and Plant ...	7,577
...	...	...	...	...	...	...	...	...	...	Direct Receipts ...	395
22,529	2,52,917	5,42,347	8,29,359	1,08,257	3,54,549	2,39,523	35,291	2,67,599	10,65,219	Total Shikarpur Canals ...	38,201
471	7,646	12,631	19,515	...	...	...	...	...	...	GHAR CANALS.	
23,000	2,60,563	5,54,878	8,48,874	1,08,257	3,54,549	2,39,523	35,291	2,67,599	10,65,219	Ghar Bunds—Improvements and maintenance and repairs ...	42,334
2,41,199	47,11,228	1,00,55,610	1,55,51,386	...	...	...	...	...	...	General charges, Establishment and Tools and Plant ...	10,620
7,801	1,37,704	2,69,791	4,59,878	...	...	...	...	...	...	Direct Receipts ...	213
2,49,000	48,48,932	1,03,55,401	1,60,11,264	...	...	...	...	...	...	Total Ghar Canals ...	52,954
6,840	2,26,676	7,88,345	14,05,059	...	...	...	...	...	...	WESTERN NARA CANALS.	
37,571	20,35,696	1,20,65,100	1,96,10,568	...	...	...	...	...	...	Nara Bund—Improvements and maintenance and repairs ...	9,761
...	...	...	...	...	...	...	...	...	...	General charges—Establishment and Tools and Plant ...	2,488
...	...	...	...	...	...	...	...	...	...	Direct Receipts ...	82
...	...	...	...	...	...	...	...	...	...	Total Western Nara Canals ...	12,249
...	...	...	...	...	...	...	...	...	...	EASTERN NARA.	
...	...	...	...	...	...	...	...	...	...	Direct Receipts ...	2
...	...	...	...	...	...	...	...	...	...	KARA'CHI CANALS.	
...	...	...	...	...	...	...	...	...	...	Mathematical Instrument Depot in Sind and Tools and Plant charges of the Superintending Engineer ...	2,926
...	...	...	...	...	...	...	...	...	...	Direct Receipts ...	1
...	...	...	...	...	...	...	...	...	...	Total Karachi Canals ...	2,926
...	...	...	...	...	...	...	...	...	...	Grand Total ...	2,33,753

of less credit in previous year.
of differences due to ams and pies.
direct working expenses—Fife Government Resolution No. 1637, dated 2nd October 1889.

FRED. HUTCHINSON,
Examiner, Public Works Accounts

KOTRI GAUGE.

Series of readings for the year 1890.
Series of Mean readings for 10 years ending 1890.
Series of Mean readings for 4 years ending 1889.

Days.	REMARKS.	ACQUET.	JULY.	SEPTEMBER.	REMARKS.
		10 years' M. ending 1890.	10 years' M. ending 1890.	10 years' M. ending 1890.	
		ft. in.	ft. in.	ft. in.	
1	...	10 5	10 9	11 3	...
2	...	10 6	11 0	11 4	...
3	...	9 7	10 8	11 5	...
4	...	10 4	10 11	11 9	...
5	...	11 0	11 1	12 0	...
6	...	11 6	11 4	12 2	...
7	...	11 10	11 8	12 5	...
8	...	12 3	12 0	12 9	...
9	...	12 5	12 4	12 11	...
10	...	12 1	12 5	13 1	...
11	...	12 0	12 7	13 2	...
12	...	12 4	12 9	13 7	...
13	...	12 6	13 10	14 0	...
14	...	12 8	13 10	14 3	...
15	...	12 8	13 10	14 3	...
16	...	12 10	13 10	14 6	...
17	...	13 0	13 0	14 5	...
18	...	13 0	13 1	14 6	...
19	...	13 0	13 2	14 6	...
20	...	12 4	13 4	15 0	...
21	...	12 3	13 7	15 1	...
22	...	12 5	13 8	15 4	...
23	...	12 9	13 10	15 6	...
24	...	13 3	13 11	15 6	...
25	...	13 9	14 0	15 6	...
26	...	13 9	14 0	15 6	...
27	...	13 9	14 0	15 6	...
28	...	13 10	14 1	15 6	...
29	...	14 1	14 2	15 7	...
30	...	14 4	14 3	15 9	...
31	...	...	...	...	...

H. M. THOMPSON, M. Inst., C.E.,
Superintending Engineer in Sind.

BUKKUR GAUGE.

Series of readings for the year 1890.
Series of Mean readings for 10 years ending 1890.
Series of Mean readings for 4 years ending 1889.

Days.	REMARKS.	ACQUET.	JULY.	SEPTEMBER.	REMARKS.
		10 years' M. ending 1890.	10 years' M. ending 1890.	10 years' M. ending 1890.	
		ft. in.	ft. in.	ft. in.	
1	...	7 10	8 6	9 0	...
2	...	9 3	8 8	9 2	...
3	...	9 7	8 0	9 5	...
4	...	10 0	9 2	9 7	...
5	...	10 0	9 8	9 11	...
6	...	9 11	9 11	10 1	...
7	...	9 10	10 0	10 2	...
8	...	9 8	10 2	10 3	...
9	...	9 10	10 3	10 1	...
10	...	10 4	10 5	10 9	...
11	...	10 2	10 4	10 3	...
12	...	10 4	10 5	10 9	...
13	...	10 4	10 5	10 9	...
14	...	10 6	10 7	10 9	...
15	...	10 7	10 8	11 0	...
16	...	10 8	10 8	11 0	...
17	...	10 10	11 0	11 1	...
18	...	10 5	11 2	11 3	...
19	...	9 5	11 5	11 3	...
20	...	9 7	11 5	11 3	...
21	...	9 11	11 5	11 3	...
22	...	10 6	11 6	11 3	...
23	...	10 9	11 5	11 3	...
24	...	10 7	11 5	11 3	...
25	...	10 6	11 5	11 3	...
26	...	10 8	11 6	11 3	...
27	...	11 0	11 7	11 3	...
28	...	11 3	11 7	11 3	...
29	...	11 0	11 8	11 3	...
30	...	12 0	11 9	11 3	...
31	...	...	...	...	...

No. 4711-A of 1891.

PUBLIC WORKS DEPARTMENT.

FROM

THE SUPERINTENDING ENGINEER IN SIND;

To

THE SECRETARY TO GOVERNMENT,
PUBLIC WORKS DEPARTMENT.*Camp Bakhora, 24th December 1891.*

SIR,

I have the honour to forward the Irrigation Revenue Report of this Division for 1890-91 with the usual accompaniments.

2. My other work has been so heavy, especially during the last two months, that I have not been able to devote as much time and thought to the preparation of this report as I wished. I regret to say that I have not been able to get the crop return completed in time, but I hope to be able to forward it next month.

I have the honour to be,

Sir,

Your most obedient Servant,

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

THROUGH THE COMMISSIONER IN SIND.

No. 170 of 1892.

PUBLIC WORKS DEPARTMENT.

*Commissioner's Office,
on the Indus, 15th January 1892.*Irrigation Revenue Report
for 1890-91.

Submitted to Government.

2. This report was received by the Commissioner in Sind on Christmas day, by which time part of the Committee on Irrigation, of which he is President, had assembled and work begun. The incessant demands since then on the Commissioner's time, caused by the sittings of the Committee, which are not yet concluded, and which have stopped all but most emergent work, accounts for the slight delay in forwarding the report. The delay is however of less consequence, as there is but little calling for comment. The report is the record of the season of the year before last, and a new departure, or, to be more accurate, a continuance on perhaps rather more definite lines and on a more liberal scale of expenditure, of the irrigation policy that has been so successful of late years, will, it is hoped, be the result of the Committee's labours. The Commissioner has already reported what he can do towards expediting the statistics required for this report, and he hopes that in future years it will be received even earlier than it is on the present occasion.

No. 2972, dated the 31st
August 1891.

3. The canal revenue shows a slight falling off, compared with 1889-90, of half a lakh of rupees, but taking all the surrounding circumstances into consideration, the results must be considered most satisfactory. The inundation was much poorer than the year before, the early fall in September being very serious, and the area cultivated fell off almost everywhere. In 1889-90 besides the revenue from large rabi areas, due mainly to floods in Rohri and in the Eastern Nara Division, was credited to canals. Not that this credit was wrong, for

every care is taken to credit to canals no more than is justly due to them. Still any attempt at over-refinement in such matters would be expensive and tedious as well as tending to inaccuracy, in a country where a field may at one time be fed with water lifted from one canal, at another time watered from the overflow of another canal, or from the combined overflow of a canal and the river. And the Superintending Engineer is, the Commissioner believes, of the opinion that the canals do not always obtain their just share. In the year under report, besides the diminution of flooded rabi, the Begári and Unharwáb, which already do more duty than was expected of them, worked badly and floods did considerable damage to crops and revenue, especially in the Karáchi District. Taking all these together, the maintenance of the revenue at its high figure is a very satisfactory index of the gradual extension of sure and permanent, as opposed to risky cultivation, dependent upon accidents. With a river untrained and uncontrolled as the Indus is at present, fluctuations, more or less violent, in the revenue will always be liable to occur. Just as the Pritchard Canal in 1890-91 was filled up with sand by the set of the river, so in the present season (1891-92) the Desert Canal has suffered severely from erosion at its mouth, and the kharif crop in two talukas was eaten bare by locusts, over almost the entire area. But on the whole signs are everywhere apparent of the extensions of stable cultivation. In spite of a poor inundation of 1890-91 these fine old canals, the Ghár and Fuleli (the systems of both of which need extensions and improvements), show an increase in cultivation, and so do other canals in the Hyderabad Division, consequent on the extra clearance and the attention that has been paid to them of late. Government will, it is hoped, look on the results of this season as even a better proof of good canal working than last year's results afforded.

4. The principal event of the year was the formation of the Western Nára Division, in order that that important canal and the Munchar Lake connected with it might be treated by one Executive Engineer, although at present in different districts. The Pritchard Canal was finished in order to supplement the deficient supply in this canal, but it failed, owing to the unfortunate erosion of the river. The cultivation on the Munchar Lake suffered severely. More than usual of the bed was exposed and a bumper crop was expected, when unforeseen and abnormally heavy rain from the hills filled it again and drowned the cultivated area. The damage done by the winter rains to the gathered crops all over Sind was lamentable, but in spite of it there was no difficulty in collecting the revenue. In some parts the untimely rain helped the cultivators to plough.

5. The falling off in cultivation in Khelát is partly due to the Begári being overworked, and the canals which tail from it into Khelát not carrying a sufficiency of water. This defect will be remedied by the project lately submitted, called the Shikárpur Canal. It is important that the Beluchis on the frontier should be given means of cultivation, even though the Government does not reap directly a sufficient payment for the water. The non-collection of hakába on the Desert Canal is alluded to further on.

6. *Statement E.*, paragraph 13.—The discrepancies in the balances for 1889-90 were small, only Rs. 2, Rs. 202 and Rs. 3 respectively, due to accidental errors discovered when closing the accounts. The balances outstanding at the end of 1890-91 appear large. A portion of them, however, represents remissions which were not punctually disposed of. Some has been recovered, so that only a small part of the amount represents real postponements, due to special causes in both Shikárpur and Karáchi.

7. Realisations of hakába show a general increase, except in Khelát. Measures are now being taken, under which the assessment and collection of the full payment due by Jágírdárs all over Sind will be more accurately effected in future.

8. There appears a discrepancy between the share credited to canals on account of sales of occupancy-right as shown in Table VI-A. and VII-B. In the first, it is put at Rs. 15,066 (this figure is stated to have been communicated by the Examiner, Public Works Accounts), and in the second at Rs. 3,979.

But the Superintending Engineer's and Examiner's figures seldom seem to agree.

9. The reduction in remissions (in spite of a poor inundation) to Rs. 67,845 against Rs. 2,33,442 in the previous year and a six-year average of Rs. 1,27,217 is satisfactory. The larger part were in Karáchi where the cultivation of one of the finest Tapas was destroyed by a flood which breached the protective bunds.

10. The expenditure on maintenance (works) was Rs. 9,77,315, a little in excess of the previous year, of which Rs. 4,80,213 was spent upon silt clearance proper. The Commissioner earnestly hopes that the Government will give the extra grant of Rs. 1,20,000 so often recommended for special improvements and repairs. Not only is it greatly needed, but it will well repay the outlay, and till it is granted, the policy cannot be developed of separating clearly maintenance charges from improvements, the tendency to execute the latter at the expense of the former out of the common maintenance fund will remain and complaints continue. The statement in para. 18, which appears for the first time, is interesting, and the Commissioner trusts that it will be accurately maintained in future years. It shows Rs. 42,940 more spent on silt removal and Rs. 44,442 more on embankments than in the previous year. Statement G (a). shows the detail of establishments debited to works under maintenance, divided between supervising and abkaláni. The results are as follows for four years :—

Years.	Works.	ESTABLISHMENT DEBITED TO WORKS.			Grand Total.
		Supervising.	Abkaláni.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	8,34,018	58,931	1,48,552	2,07,483	10,41,501
1888-89	7,21,023	52,296	1,47,130	1,99,426	9,20,449
1889-90	7,83,915	62,055	1,19,547	1,81,602	9,65,517
1890-91	8,01,214	69,118	1,06,983	1,76,101	9,77,315

The progressive reduction in abkaláni establishments in 1889-90 and 1890-91 is satisfactory. One outcome of the present Committee's deliberations will, it is hoped, lead to the fixing accurately the difference between permanent and temporary hands and the manner in which improvements can be separated from maintenance, so that every year the security will become greater that the canal clearance grant is properly expended. The grant of the separate allowance of Rs. 1,20,000 for new works of improvement and special repairs up to Rs. 10,000 will forward this policy. Of the sum of Rs. 4,24,256* spent on Minor Works (Statement G (2)). Mr. Thompson shows, excluding river embankments (of which Rs. 73,567 was spent on a single loop for the Kashmor bund, afterwards found by a freak of the river to have been only just not necessary) and Rs. 1,78,549 upon the Pritchard Canal, that only Rs. 46,180 were spent on the numerous small works which are called for in every part of the province. However, the Fuleli and main minor inundation canals are now being taken up *seriatim* and regular projects are being prepared.

11. The expenditure from Capital on new Major Works was Rs. 63,661, all in the Eastern Nára District, which will be commented upon in the Committee's forthcoming report, besides Rs. 17,474 on the Fuleli (Minor Works).

12. The cost of maintenance per acre was 0·75 as against 0·69 per cent. This is not a high charge. The cost of collection, at 10 per cent. on the revenue, is estimated and is probably not too low, as nearly all the village establishments are paid for from a separate cess levied for the purpose.

13. For the year 1890-91, the Commissioner has worked out for his own information some of the useful tables embodied in Government Resolution No. 86 W. I.—970 of 9th June 1891, reviewing the report for 1889-90, and he begs to submit the result so as to avoid the necessity for the tables being done over again.

14. The following table shows the cultivation and revenue compared with 1888-89 and 1889-90 (the last a year of exceptionally good inundation):—

CULTIVATION.	1890-91.		1889-90.		1888-89.		Increase in 1890-91 as compared with 1889-90.		Decrease in 1890-91 as compared with 1889-90.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Government Lands ...	1,955,157		2,109,804		1,887,556		...		154,655	
Jāghir Lands ...	248,316		240,015		231,079		...		...	
Total Cultivation Acres ...		2,203,473		2,349,819		2,118,635		8,801		154,647
									Net decrease.	146,346
REVENUE.										
<i>Treated in the Accounts as Indirect Revenue.</i>										
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Land and Water Assessment ...	50,98,756		53,26,693		47,58,261		...		2,27,937	
Deduct—Remissions ...	67,845		2,38,442		63,046		...		1,65,597	
Net Consolidated Assessments		50,30,911		50,88,251		46,95,215		...		62,340
Deduct—Land share ...		5,03,096		5,06,319		4,60,519		...		6,223
Irrigation or water-share of net consolidated Assessments ...										
		45,27,815		45,81,932		42,34,697		...		56,117
<i>Accounted for as Direct Receipts.</i>										
Assessment on Jāghir cultivation ...	1,33,044		1,42,819		137,455		...		9,775	
Deduct—Remissions ...			1,590				...		1,590	
		1,33,044		1,41,229		1,37,455		...		8,185
Miscellaneous Receipts (accruing) ...		85,106		55,167		49,604		...		62
Total Direct Receipts ...		88,149		1,96,396		1,87,059		...		8,247
Total Canal Revenue ...		47,15,964		47,80,328		44,12,756		...		64,364

We have thus done almost as well as in the best year, 1889-90, and much better than in 1888-89.

15. The cultivation was distributed as follows:—

		1890-91.	1889-90.	1888-89.	Increase in 1890-91 as compared with 1889-90.	Decrease in 1890-91 as compared with 1889-90.
		Acres.	Acres.	Acres.	Acres.	Acres.
Government Lands	{ Kharif ...	1,596,939	1,722,040	1,648,586	...	125,101
	{ Rabi ...	358,218	387,764	238,970	...	29,546
	Total ...	1,955,157	2,109,804	1,887,556	...	154,647
Jāghir Lands	{ Kharif ...	203,341	214,591	205,843	...	11,250
	{ Rabi ...	44,975	25,424	25,236	19,551	
	Total ...	248,316	240,015	231,079	19,551	11,250
				Net increase.	8,801	
Total	{ Kharif ...	1,800,280	1,936,631	1,854,429	...	136,351
	{ Rabi ...	403,193	413,188	264,206	...	9,995
	Total ...	2,203,473	2,349,819	2,118,635	...	146,346

16. The decrease in cultivation on Government lands was made up as follows:—

Canal Districts.	INCREASE.			DECREASE.		
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begári Canals ...	...	10,580	10,580	48,938	...	48,938
Shikárpur Canals ...	...	6,656	6,656	21,658	...	21,658
Ghár Canals ...	...	5,328	5,328	2,820	...	2,820
Western Nára ...	...	...	...	29,654	1,027	30,681
Eastern Nára ...	...	...	...	17,087	41,194	58,281
Hyderabad Canals ...	...	2,549	2,549	8,522	...	8,522
Fuleli Canals ...	3,647	...	3,647	...	6,480	6,480
Karáchi Canals ...	...	...	...	69	5,958	6,035
	3,647	25,113	28,760	128,748	54,659	183,407
Deduct—Increase ...				3,647	25,113	28,760
Net Decrease ...				125,101	29,546	154,647

The diminution in Government rabi was 29,546 acres and from table 5 it will be seen that the area in canals in Rohri has diminished by 14,910 acres, which accounts for a great part of it. The Commissioner gathers from these figures that the profits of rabi are causing the area under cold weather crops to extend generally, or in a year like that under consideration the diminution in the area of cold weather crops should have been much larger. The demand for wheat to export no doubt contributes to this. The increase of rabi in the Begári, Shikárpur and Ghár Canals District alone amounted to 22,564 acres, only part of which (in the Ghár) was due to a flood. The fall of 41,194 acres in the Eastern Nára District is due to the smallness of the flood and to the overgrowth by jungle of the land flooded in the previous year.

17. The statement below compares cultivation and irrigation share of net consolidated revenue for each class of works, excluding jághírs, for which Mr. Thompson has, as directed in para. 42 of last year's review, given a new Table III-A :—

		1890-91.	1889-90.	1888-89.	Increase in 1890-91 as compared with 1889-90.	Decrease in 1890-91 as compared with 1889-90.	Per- centage.
Major Works ...	{ Cultivation...Acres.	443,968	539,803	489,311	...	95,835	18
	{ Revenue ... Rs.	8,51,981	9,67,981	9,02,742	...	1,16,000	12
Minor Works—							
Works for which capital	{ Cultivation...Acres.	681,786	673,928	601,970	7,858	...	1
and Revenue Ac-	{ Revenue ... Rs.	16,74,823	15,92,512	14,45,064	82,311	...	5
counts are kept							
Works for which only	{ Cultivation...Acres.	824,844	890,710	792,595	...	65,866	7
Revenue Accounts are	{ Revenue ... Rs.	19,92,724	20,13,485	18,71,162	...	20,746	1
kept							
Bunds ...	{ Cultivation...Acres.	4,559	5,363	3,680	...	804	15
	{ Revenue ... Rs.	8,287	9,954	6,729	...	1,667	17
Total ...	{ Cultivation...Acres.	1,955,157	2,109,804	1,887,556	...	154,647	7.3
	{ Revenue ... Rs.	45,27,815	45,83,932	42,25,697	...	56,102	1.2

A reference to Table VII-A shows that in spite of the season, the Fuleli system still showed a small improvement over even the year 1889-90. This is a prognostication of the success of contemplated works for improving this canal.

18. The progress of cultivation and revenue on each class of canals for six years will be learnt from the following statement. Minor Works (Capital) which include the Fuleli, continue to show the best results :—

Abstract.	1885-86.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	253,662	80,684	334,346	6,16,602
Minor Works, Capital ...	431,621	41,978	473,599	11,21,027
Do. Revenue ...	602,225	116,680	718,905	16,84,749
Do. Agricultural ...	1,347	4,525	5,872	10,812
Total ...	1,288,855	243,867	1,532,722	34,33,190

	1886-87.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	292,710	39,426	332,145	6,16,830
Minor Works, Capital ...	473,144	36,589	509,733	12,22,329
Do. Revenue ...	640,629	105,890	746,519	17,40,688
Do. Agricultural ...	1,286	3,983	5,269	9,652
Total ...	1,407,778	185,888	1,593,666	35,89,499

	1887-88.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	323,232	50,663	373,895	6,89,468
Minor Works, Capital ...	469,157	57,237	526,394	12,56,404
Do. Revenue ...	644,695	104,803	749,498	17,67,461
Do. Agricultural ...	1,182	2,708	3,840	6,958
Total ...	1,438,216	215,411	1,653,627	37,20,291

	1888-89.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	411,939	77,372	489,311	9,02,742
Minor Works, Capital ...	527,525	74,445	601,970	14,45,064
Do. Revenue ...	707,808	84,842	792,650	18,71,257
Do. Agricultural ...	1,314	2,311	3,625	6,634
Total ...	1,648,586	238,970	1,887,556	42,25,697

	1889-90.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	418,047	121,756	539,803	9,67,981
Minor Works, Capital ...	555,750	118,178	673,928	15,92,512
Do. Revenue ...	745,646	145,064	890,710	20,13,485
Do. Agricultural ...	2,597	2,766	5,363	9,954
Total ...	1,722,040	387,764	2,109,804	45,83,932

	1890-91.			
	CULTIVATION.			Irrigation share of net consolidated Assessment.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	Rs.
Major Works ...	353,289	90,679	443,968	8,51,981
Minor Works, Capital ...	556,792	124,994	681,786	16,74,823
Do. Revenue ...	685,528	139,308	824,844	19,92,724
Do. Agricultural ...	1,330	3,229	4,559	8,287
Total ...	1,596,939	358,210	1,955,157	45,27,815

19. Turning to Major Works, the Desert Canal was not so good as for two years past—*vide* the following statement :—

	1888-89.	1889-90.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation—					
Government lands—					
Kharif ...	62,584	77,340	77,594	254	...
Rabi ...	6,591	5,437	4,074	...	1,363
Total ...	69,175	82,777	81,668	...	1,109
Jágíir Lands ...	43,980	44,802	43,251	...	1,551
Total Cultivation Acres ...	113,155	127,579	124,919	...	2,660
	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Revenue—					
Kharif ...	1,25,321	1,54,602	1,55,281	679	...
Rabi ...	12,695	10,529	7,987	...	2,542
Total ...	1,38,016	1,65,131	1,63,268	...	1,863
Remissions—					
Kharif ...	...	441	29	...	412
Rabi ...	...	...	...	...	...
Total ...	...	441	29	...	412
Net Consolidated Revenue ...	1,38,016	1,64,690	1,63,239	...	1,451
Water share ...	1,24,214	1,48,221	1,46,916	...	1,305
Hakába ...	70,102	51,768	27,773	...	23,995
Miscellaneous ...	264	167	257	90	...
Total Canal Revenue ...	1,94,580	2,00,156	1,74,946	...	25,210

The canal would have done better than in the previous year, had not the hakába again shown a falling off :—

1888-89	Rs. 70,102
1889-90	51,768
1890-91	27,773 (out of Rs. 46,971 for collection).

The Commissioner will endeavour to ascertain the reason of this. According to Table III-A, it appears that there is a balance of hakába outstanding against Khelát of Rs. 19,348. (It is to be noticed the water and canal share of net consolidated revenue for 1890-91, as given in Tables I, III and VI, do not agree with the Examiner's figures (Table VI-A), the aggregate difference between column 5 of Table III and column 2 of Table VI-A comes to a difference of Rs. 19,616.)

20. The figures for the Unharwáh, as observed by the Superintending Engineer, are the worst on record, and are attributed to the action of the river upon the dhand supplying this canal and the Begári; it greatly needs enlarging :—

	1888-89.	1889-90.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation—					
Kharif ...	38,335	32,270	17,866	...	14,404
Rabi ...	4,837	1,570	2,824	1,254	...
Total ...	43,172	33,840	20,690	...	13,150

	1889-90.	1890-91.	1891-92.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Revenue—					
Kharif ...	77,702	65,428	35,859	...	29,569
Rabi ...	10,292	3,263	6,013	2,750	...
Total ...	87,994	68,691	41,872	...	26,819
Remissions—					
Kharif ...	...	2,057	260	...	1,797
Rabi ...	...	...	58	58	...
Total ...	...	2,057	318	...	1,739
Net Consolidated Revenue ...	87,994	66,634	41,554	...	25,080
Water share ...	79,195	59,971	37,399	...	22,572
Miscellaneous ...	44	27	27	...	...
Total Canal Revenue ...	79,239	59,998	37,426	...	22,572

21. The Begári has given poorer results by Rs. 57,378, owing to the same cause as the Unharwáh, and compared with 1888-89, the decrease in revenue is only Rs. 676 short of a lách of rupees. This canal affords a fair illustration of the capriciousness of the Indus. Seeing that the supply was 1,000 cubic feet a second short compared with the year before, it would not have been a cause of surprise had the loss been greater. Complaints that this canal is over-worked were of course loud, for if with a full supply the water is insufficient, the result of a curtailed supply can be imagined—

	1888-89.	1889-90.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation—					
Government Lands—					
Kharif ...	147,494	136,150	102,629	...	33,521
Rabi ...	15,770	5,383	15,609	10,326	...
Total ...	163,264	141,533	118,238	...	23,295
Jágírh Lands ...	38,454	41,946	25,815	...	16,131
Total Cultivation ...	201,718	183,479	144,053	...	39,426
	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Revenue—					
Kharif ...	3,22,195	2,99,511	2,21,860	...	77,651
Rabi ...	38,498	30,589	44,539	13,950	...
Total ...	3,60,693	3,30,100	2,66,399	...	68,701
Remissions—					
Kharif ...	1,533	8,501	3,379	...	5,122
Rabi ...	14,583	15,931	3,674	...	12,257
Total ...	16,116	24,432	7,053	...	17,379
Net Consolidated Revenue ...	3,44,577	3,05,668	2,59,346	...	46,322
Water share ...	3,10,119	2,75,101	2,33,411	...	41,690
Hakába ...	50,494	43,655	28,041	...	15,614
Miscellaneous ...	477	388	314	...	74
Total Canal Revenue ...	3,61,090	3,19,144	2,61,766	...	57,378

22. The Eastern Nára, which in 1889-90 showed an increase of Rs. 96,202, has lost Rs. 45,910 of this amount, due to less flooding, as has been explained. Measures to be proposed by the Committee will, it is hoped, prevent ordinary spills, afford the artificial supply and largely increase the revenue. Table VII shows that almost the whole of the decrease was on the Eastern Nára which contributed Rs. 40,215 to the deficit. The new Khipra Canal yielded Rs. 7,282, but cultivation upon this will not be encouraged, as it comes within the unprotected area. The following statement will show the figures for three years:—

	1888-89.	1889-90.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation—					
Government Lands—					
Kharif ...	163,526	172,287	155,200	...	17,087
Rabi ...	50,174	109,366	68,172	...	41,194
Total ...	213,700	281,653	223,372	...	58,281
Jághir Lands	4,000	3,560	4,920	1,360	...
Total Cultivation Acres ...	217,700	285,213	228,292	...	56,921
	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Revenue—					
Kharif ...	3,44,018	3,67,725	3,62,126	...	5,599
Rabi ...	89,315	1,75,809	1,22,604	...	53,205
Total ...	4,33,333	5,43,534	4,84,730	...	58,804
Remissions—					
Kharif ...	874	4,996	1,950	...	3,046
Rabi ...	...	...	274	274	...
Total ...	874	4,996	2,224	...	2,772
Net Consolidated Revenue ...	432,459	5,38,538	4,82,506	...	56,032
Water share ...	3,89,214	4,84,688	4,34,255	...	50,433
Hakába... ..	986	1,830	3,276	1,446	...
Miscellaneous ...	15,824	15,708	18,785	3,077	...
Total Canal Revenue ...	4,06,024	5,02,226	4,56,316	...	45,910

23. A statement showing the progress of cultivation and revenue on the 4 Major Works shows that though the progress of 1889-90 has not been maintained, the increase of 1890-91 over the average of the past six years is Rs. 1,24,239. The Major Works in fact contributed Rs. 1,16,000 to the decrease of revenue:—

	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Total.	Average.	1890-01.	Increase or Decrease.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Desert Canal.										
Cultivation ... { Kharif ...	63,177	47,339	37,131	47,059	62,534	77,340	334,030	55,772	77,504	1,21,822
{ Rabi ...	11,522	5,796	2,437	3,948	6,591	5,437	34,531	5,755	4,074	D. 1,681
Total ...	74,699	53,135	39,568	50,107	69,125	82,777	369,161	61,527	81,688	1,20,141
Irrigation share of net Consolidated Assessment ...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	1,29,167	92,469	65,311	89,722	1,24,214	1,48,231	6,50,094	1,08,349	1,46,916	1,38,667

	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Total.	Average.	1890-91.	Increase or Decrease.
Unharada.										
Cultivation ... { Kharif ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation ... { Rabi ...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	...	...	...	...	...	...	...	...
Irrigation share of net Consolidated Assessment ...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canal.										
Cultivation ... { Kharif ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation ... { Rabi ...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	...	...	...	...	...	...	...	...
Irrigation share of net Consolidated Assessment ...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Eastern Nard.										
Cultivation ... { Kharif ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation ... { Rabi ...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	...	...	...	...	...	...	...	...
Irrigation share of net Consolidated Assessment ...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Grand Total.										
Cultivation ... { Kharif ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cultivation ... { Rabi ...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	...	...	...	...	...	...	...	...
Irrigation share of net Consolidated Assessment ...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.

24. The Sukkur Canal showed a slight decrease in cultivation and a slight increase in revenue. This canal does not at present get the credit due to it from double crops and the best way of reassessing them is now under the consideration of Government. The Sind Canal gives the following figures :—

1890-91	Cultivation.	Revenue.
1889-90	66,527	Rs. 1,79,323
	68,228	Rs. 1,75,665
Decrease ...	1,701	Increase ... 3,658

This increase in revenue is probably due to an extension of rice cultivation. The figures for the Ghar are as follows :—

1890-91	...	Acres.	Cultivation.	Revenue.
1889-90	...	...	2,53,114	Rs. 7,12,364
	...	...	2,36,097	Rs. 6,49,861
Increase ...	...	...	17,017	62,503

The Fuleli gives the following results :—

1890-91	...	Acres.	Cultivation.	Revenue.
1889-90	...	...	3,32,765	Rs. 6,16,684
	...	...	3,21,222	Rs. 5,88,292
Increase ...	...	...	11,543	28,392

The Pinyári—

1890-91	...	Acres.	Cultivation.	Revenue.
1889-90	...	...	70,226	Rs. 1,66,315
	...	...	79,880	Rs. 1,70,861
Decrease ...	...	...	9,654	4,546

The Naolakhi—

1890-91	...	Acres.	Cultivation.	Revenue.
1889-90	...	...	50,482	Rs. 1,08,984
	...	...	55,541	Rs. 1,18,260
Decrease ...	...	...	5,059	9,276

The Western Nára—

1890-91	...	Acres.	Cultivation.	Revenue.
1889-90 { Shikarpur ...	...	1,58,642	2,07,373	Rs. 5,50,666
{ Karáchi ...	...	78,528	4,25,941	1,63,505
	...	...	2,37,170	5,89,446
Decrease ...	...	...	29,797	38,780

It is to be hoped that the Pritchard Canal and the new feeder just sanctioned will restore the prosperity of this fine canal.

25. The only other canals which need be singled out for notice are the two following :—

Gháro Mahmuda—

				Cultivation.		Revenue.
1890-91	...	...	Acres.	71,755	Rs.	1,22,821
1889-90	...	...	"	69,096	"	1,18,199
			Increase	2,659		4,622

Marak—

				Cultivation.		Revenue.
1889-90	...	...	Acres.	52,577	Rs.	1,01,965
1890-91	...	...	"	49,421	"	95,531
			Decrease	3,156		6,434

26. The Acting Commissioner notices with regret the omission of the Munchar Lake and considers it should occupy a special place in the Canal Revenue Report apart from the Western Nára. The cultivation on it, were improvement possible, would yield a revenue running into lakhs, and as it depends on two Government canals, the Western Nára and the Aral, for its filling and draining, it should be classed as a separate Government canal, the existing revenue being deducted before calculating the profits on such works as may be undertaken upon it.

27. Suggestions however are out of place in connection with an administration report, but the Commissioner cannot help thinking that the area of wheat, cotton and oil-seeds should be added to Table VIII so that the duty of water in respect of rabi crops may be known and that the progress of their cultivation may be noticed by the Irrigation Department. Table VIII-A has not yet reached the Commissioner.

28. As the report of the Irrigation Committee before alluded to will shortly be placed before Government, the Commissioner will not further detain these papers by any general remarks on what has been accomplished in 1890-91. Mr. Thompson's report gives a brief but interesting account of the working of the canals in each division. The Commissioner will only add an expression of his own hope that his lack of time at the present moment has not led to his overlooking any important point in the report or in the voluminous tabular statements, by which it is accompanied.

29. With the permission of Government the Commissioner will submit the report and his remarks in print in future.

H. E. M. JAMES,
Acting Commissioner in Sind.

No. 503 of 1892.

PUBLIC WORKS DEPARTMENT.

Camp Khorewah, ^{2nd}/_{3A} February 1892.

FROM

THE SUPERINTENDING ENGINEER IN SIND;

TO

THE SECRETARY TO GOVERNMENT,

Public Works Department,
Bombay.

SIR,

I have the honour to forward herewith the crop return for Sind for five years, ending 1890-91 as promised in my letter No. 4711-A. of 1891, submitting Irrigation Revenue Report for 1890-91.

2. The various kinds of crops irrigated by each canal by lift and flow during the five years are given in detail in the statement for kharif and rabi separately; while in the abstract are shown the totals of lift and flow irrigation for each canal and each canal district separately.

3. The chief features of the returns are the return of the area of rice to that of 1886-87 accompanied by a steady increase of the total of kharif, and the large increase of wheat cultivation.

I have the honour to be,

Sir,

Your most obedient Servant,

H. M. THOMPSON, M.Inst.C.E.,

Superintending Engineer in Sind.

No. 748 of 1892.

PUBLIC WORKS DEPARTMENT.

Commissioner's Office,

Camp Dādu, 19th February 1892.

Submitted.

2. In a foot-note to the return the Superintending Engineer states that in some cases the figures entered in the return will not agree with those recorded in Table VII of his revenue report and that a correct statement will be forwarded with the next year's report, but it is not understood why correct figures could not be shown in all cases in the present return. Conclusions based on incorrect figures are of little value unless the error be a very minor one.

3. The return shows that rice is largely grown on the following canals:—

- | | |
|---------------------|--|
| 1. Begāri. | 11. Other canals in the Fuleli District. |
| 2. Canals in Rohri. | 12. Kalri. |
| 3. Sind Canal. | 13. Baghar. |
| 4. Sukkur Canal. | 14. Uchto. |
| 5. Ghar Canal. | 15. Canals in Tatta and Sbal. |
| 6. Western Nāra. | 16. Pinyāri. |
| 7. Eastern Nāra. | 17. Canals in Mirpur Batoro. |
| 8. Mithrao. | 18. Canals in Sujawal. |
| 9. Thar Canal. | 19. Satta. |
| 10. Fuleli. | 20. Khanta. |
| | 21. Kokawari. |

4. The rice cultivation on the Begāri in 1886-87 stood at acres 11,162. This figure fell to 6,984 in 1888-89 and to 4,414 in 1890-91. The canals in Rohri show a steady increase from 8,592 acres in 1888-89 to 11,391 in 1890-91, i.e. an increase of acres 2,335 over the area recorded in 1886-87. The Sind Canal shows a decrease of nearly 3,500 acres. But the figures, as they stand, show that the rice cultivation on this canal is again recovering. The area under rice on the Sukkur Canal in 1886-87 was acres 30,086. It fell to acres 24,454 in 1888-89 and has again risen to acres 29,612 in 1890-91. The area on the Ghar had fallen so low as acres 45,524 in 1887-88. It now stands at acres 129,785 as compared with acres 128,847 in 1886-87. This is very satisfactory. The figures entered against the Western Nāra for 1890-91 represent the rice area on the entire system, whereas the figures for 1886-87 to 1889-90 represent cultivation in the Shikārpur District only. The Superintending Engineer should have collected all the figures for the Western Nāra system in one place for purposes of comparison. If the figures for the Karāchi District be added the result will be as under:—

1886-87	...	...	Acres	74,993
1887-88	...	...	"	65,506
1888-89	...	...	"	75,599
1889-90	...	...	"	67,524
1890-91	...	...	"	71,767

This shows that the rice cultivation is gradually recovering on this canal. The cultivation on the Eastern Nára is apparently increasing, and on the Mithrao it has fallen from acres 58,369 in 1889-90 to acres 49,729 as compared with acres 50,361 in 1886-87. The area under rice on the Thar Canal has been fluctuating between acres 16,098 in 1886-87 and acres 25,827 in 1889-90. The Fuleli shows an increase of acres 21,048 over the area recorded in 1886-87; and the area on other canals in the Fuleli District is about the same as in 1886-87. The area on the Kkalri seems to be stationary and that on the Baghar shows an increase of about 3,000 acres. The rice cultivation on the Uchte also shows a tendency to increase. Canals in Tatta and Shal also show a slight increase. The Pinyári, which like the Fuleli, is another rice-growing canal, shows an increase of over 10,000 acres. The canals in Mirpur Batoro and Sujawal and the Satta, the Khanta and the Kokawari all show a tendency to increase their rice cultivation.

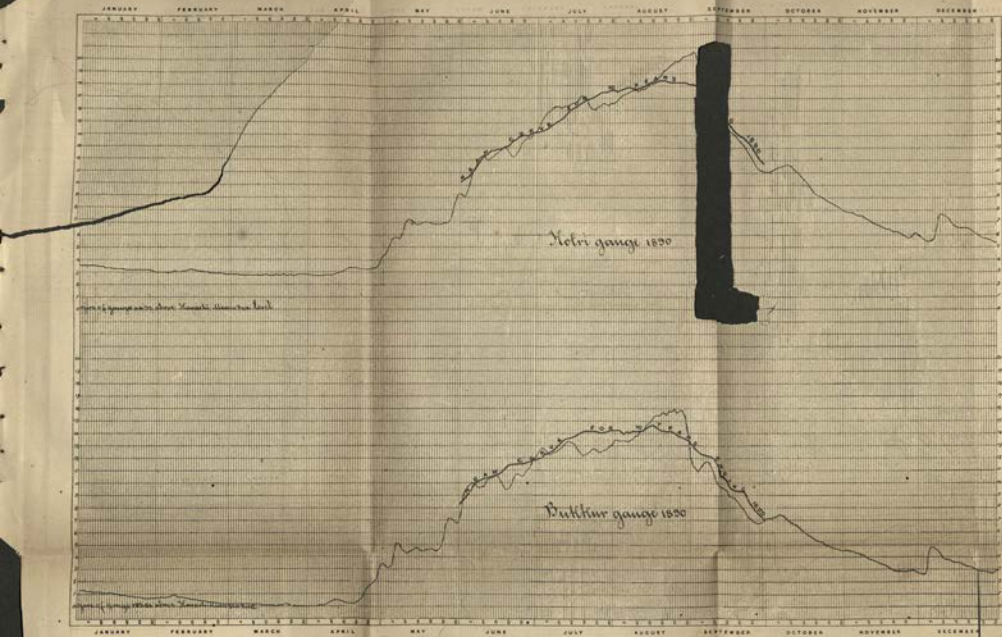
5. Turning to cotton, which is another important crop, the return shows a sudden increase of acres 13,334 on the Mithrao, on which the area under cotton in 1886-87 amounted to acres 2,975 only. This crop has also increased on the Thar Canal from acres 565 in 1886-87 to acres 5,298 in 1890-91. The Fuleli shows an increase of 7,545 acres under cotton.

6. Under the head "Wheat" the most noticeable increase is shown on the Sind, Sukkur, Ghar, Nára Supply Channel, Eastern Nára, Mithrao and Fuleli Canals, amounting, in the aggregate, to acres 62,580. There is a decrease of acres 4,710 on the Western Nára.

7. The return shows an increase of acres 273,158 and a decrease of acres 48,938, or a net increase of acres 224,220 under kharif or a net increase of 197,892 acres under rabi as the collected result of the figures for 1890-91 when compared with 1886-87.

8. It will be useful if, in the future returns, the total figures for the Province are given at the end of the statement by the Superintending Engineer.

H. E. M. JAMES,
Acting Commissioner in Sind.



H. H. H. H. H.
 Mr. J. H. H. H.
 Superintendent Engineer
 on duty



INDEX MAP
of the
PROVINCE OF SIND
to accompany Canal Revenue Report

Scale 16 Miles to an Inch



Note. Roads ruled as far as possible in straight lines
Boundaries of Canal Districts shown in different
colours as below

Begari & Districts thus ————
Sicharpur ————
Ghar ————
Western Mar ————
Hyderabad ————
Eastern Mar ————
Puleh ————
Karachi ————

Karachi 18th September 1880

N.W. & N.E. Boundary thus ————
River Indus coloured blue thus ————
Canals ————

Cart. Photograph (Mun. Press) 1882

W. H. Humphreys
Superintending Engineer,
for Irrigation,
in Sind

*Revenue Report of Irrigation Works in
Sind for 1890-91—Review of the.*

No. 98 W. I.— 1016 of 1892.

Public Works Department.

Bombay Castle,
28th June 1892.

Letter from the Superintending Engineer in Sind, No. 4711A, dated 24th December 1891.

Submits the Revenue Report of Irrigation Works in Sind for 1890-91, with statements, map and chart.

Memorandum from the Commissioner in Sind, No. 170, dated 15th January 1892.

Forwards the above with remarks.

Letter from the Superintending Engineer in Sind, No. 405, dated 29th January 1892.

Intimates certain corrections in the figures of cultivation and revenue recorded in the several tables and statements appertaining to the Sind Irrigation Revenue Report for 1890-91.

Letter from the Superintending Engineer in Sind, No. 503, dated 2nd February 1892.

Forwards the crop return for Sind for five years ending 1890-91, as promised in his letter No. 4711-A of 1891.

Memorandum from the Commissioner in Sind, No. 748, dated 19th February 1892.

Submits the above, with his remarks.

Memorandum from the Superintending Engineer in Sind, No. 955, dated 3rd March 1892.

Letter from the Examiner of Public Works Accounts, No. $\frac{B}{3}$ —213, dated 25th April 1892—

With reference to Government memorandum No. 256-I, dated 22nd April 1892. states that the cause of the difference between Tables VI-A and VII-B of the Revenue Report of Sind in respect to receipts from sale of occupancy rights is, that the figures in the former represent 4 per cent. on $\frac{2}{10}$ ths of the total of such sales to end of 1890-91, while the latter gives the same figures for the year only. Observes that the figures contained in Table VI-A supplied by him are correct; that those shown in Table VII-B furnished by the Superintending Engineer are not prepared in accordance with the method prescribed by the Government of India; that they refer to a different period, and that, therefore, they cannot possibly agree. Adds that a difference occurred in the report for 1889-90, due to the same cause, which was pointed out by him to the Superintending Engineer.

Letter from the Examiner of Public Works Accounts, No. $\frac{B}{3}$ —241, dated 6th May 1892.

RESOLUTION.—The inundation of 1890 was fair but it cannot be called good. The maximum height was reached late in August, which was favourable, but this was followed by a fall early in September, the effect of which was serious.

2. The rainfall in 1890 was above the average and well distributed, enabling lands to be ploughed and prepared for sowing, and generally in some degree made up for the deficiencies of the inundation.

3. The mileage of canals and river embankments was 5,944 and 653 respectively, as compared with 5,924 and 653 miles in the previous year. The increase in canal mileage is due to the opening of the Pritchard Canal, a new feeder to the Western Nara, which however, owing to an unfavourable change in the set of the river, was of little use during the portion of the inundation subsequent to its opening on 14th July 1890.

4. The inundation of the previous year, 1889, was exceptionally good, and the total figures for 1890-91 consequently show some falling off as compared with those of 1889-90. Comparison with 1888-89 is vitiated by the fact that the inundation of that year (1888) was the lowest known for several years.

	Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.
1889-90.			
Government Lands	1,722,040	387,764	2,109,804
Khelat do.	67,254	12,691	79,945
Jāghir do.	147,337	12,733	160,070
Total	1,936,631	413,188	2,349,819
1890-91.			
Government Lands	1,596,939	358,218	1,955,157
Khelat do.	61,966	1,778	63,744
Jāghir do.	141,376	43,197	184,572
Total	1,800,280	403,193	2,203,473
Decrease.			
Government Lands	125,101	29,546	154,647
Khelat do.	5,288	10,913	16,201
Jāghir do.	5,962	~~30,464~~	~~24,502~~
Net decrease	136,351	9,995	146,346

‡ Increases.

6. The decrease in cultivation was made up as follows :—

	Acres.
Kharif	136,351
Rabi	9,995
	146,346

There was a light increase in kharif cultivation on the Fuleli; with this exception, Statement B in paragraph 8 of the Superintending Engineer's Report shows the decrease to have been general. Of the total decrease in cultivated area the four Major Works account for 112,157 acres and from the same works the net revenue realisations have fallen by Rs. 1,10,293. This is explained by changes in the river affecting the supply to the Unbarwah and Begari and to the flood cultivation in the Eastern Nāra being less extensive.

On old canals and improved canals, the diminution of cultivation amounts only to 34,189 acres, and the revenue has increased by Rs. 45,829. The increase in revenue realisations on these canals, notwithstanding the contraction of cultivation noticed, is due partly to the decrease in the amount of remissions granted and partly to revision settlement operations. In the Fuleli and Hyderabad Canals Divisions, which are those in which most has been done in the last few years towards the improvement of old canals, and the results on which were tabulated in paragraph 32 of last year's Government Resolution, the shrinkage of cultivation amounts to 8,806 acres only, while the revenue has grown by Rs. 46,015.

The great advantage of improving the water supply in existing canals is (1) that with a moderate expenditure it distributes benefits over a large area and tends to the more profitable cultivation of lands already occupied, which will after a time justify a general increase in the rates of assessment levied on the whole cultivated area under canals to which improvements are effected, and (2) that it leads to extension of cultivation in the neighbourhoods in which cultivators are already settled and tends to check migration.

Last year's cultivation and revenue were the best on record—following an exceptionally favourable inundation. This year—with an inundation which the Superintending Engineer describes as “fair and in some respects above the average, though it cannot be called good”—we have a diminution of cultivation amounting to 146,346 acres only below last year's increase of 231,184 acres—a fall in remissions from Rs. 2,33,442 to Rs. 67,845—and a diminution in net canal revenue amounting to Rs. 64,364 only. As regards cultivation and revenue the results are better than those of any other year except 1889-90.

5. The table in paragraph 14 of the Commissioner's report shows that, as compared with 1889-90, the area of cultivation fell from 2,349,819* to 2,203,473* acres, showing a net decrease of 146,346 acres or 6½ per cent., and that the total canal revenue fell from Rs. 47,80,328 to Rs. 47,15,964, showing a decrease of Rs. 64,364, or about 1½ per cent.

Taking a broad view of the situation, the results of the year under report are the most satisfactory that Sind Irrigation has ever exhibited. They are very fairly and modestly summarised in paragraph 7 of the Superintending Engineer's report, and His Excellency the Governor in Council would fully endorse the observation made by the Commissioner at the end of paragraph 3 of his review—that Government may look on the results of the season as even a better proof of good canal working than last year's results afforded.

7. The most salient feature of the year 1889-90 was the increase in rabi cultivation in British territory, which was larger in that than in any previous year, except 1878-79, and was explained as due to the extensive areas flooded by breaches in the river embankments, spill from the river and rain floods. In the year under review the Rohri District was again swept by floods from the spill of the river: in the Ghar District a flood caused by the failure of a small sluice in the Jhali bund did some damage to the kharif cultivation, and in the Shāhbandar Districts of Karāchi considerable areas were flooded. On the other hand, heavy rain floods, which occurred in December, submerged a considerable area of wheat cultivation in the Manchur lake, and the Rohri flood occurring late in the season did not so seriously affect the Eastern Nāra Valley, and the rabi cultivation in that district was less by 41,194 acres than in the previous year, due partly to this cause and partly, it is stated, to the overgrowth by jungle of the land flooded in the previous year.

8. But the total decrease in rabi cultivation was 9,995 acres only, made up of:—

			Acres.
Decrease on Government lands	...	...	29,546
" " Khelat "	...	...	10,913
			40,459
Increase on British Jāghir lands	...	...	30,464
Net decrease...	...	...	9,995

The decrease, in the case of Government lands, on the Eastern Nāra, was thus more than compensated for by the increase in other districts, principally the Begāri, Shikārpur and Ghar Canals, the latter being due principally to floods, and in the other cases to the favourable time at which the river reached its maximum.

9. Table III-A showing the details of cultivation and assessment on Jāghir lands is given for the first time in the year under report, so that comparison in detail with the figures of previous years is not possible, but from Table D in the body of the Superintending Engineer's report it appears that the increase in rabi cultivation on lands of this class was made up as follows:—

	1890-91.	1889-90.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
<i>Foreign Jāghir—</i>				
Khelat lands ...	1,778	12,691	...	10,913
<i>British Jāghir—</i>				
Upper Sind Frontier ...	248	9	239	...
Shikārpur ...	27,556	3,434	24,122	...
Thar and Pārkar ...	39	916	...	877
Hyderabad ...	8,384	5,226	3,158	...
Karāchi ...	6,970	3,148	3,822	...
Total British Jāghir ...	43,197	12,733	30,464	...
Total Foreign and British Jāghirs ...	44,975	25,424	...	19,551

The decrease in Khelat is explained by the deficient supply in the tails of the branches of the Begāri. The increase in British jāghir is said to have been due to the ample and seasonable rainfall and the late rise in the river, but the larger proportionate increase on jāghir lands as compared with that on Government lands is not explained. The Commissioner's attention should be drawn to the matter with a view to enquiry.

10. The explanation given by the Commissioner in Sind, in accounting for a great part of the diminution in Government rabi, is incorrect: the decrease of 14,910 acres on canals in Rohri, shown in Table V, was in the total area in 1890-91 as compared with the total average of three previous years: from Table VII-A it is apparent that there was an increase in the rabi area on those canals, as compared with the previous year, of 2,555 acres due to floods.

11. The Commissioner gathers that the profits of rabi and the demand for wheat for export are causing the area under cold weather crops to extend gradually, but it is apparent that the late rise of the river at the end of August and the unusually heavy later rains afforded exceptional means for an extension of this class of cultivation in the year under review.

12. The following table shows the percentage of kharif to rabi in the several districts:—

CANALS DISTRICT.	GOVERNMENT LANDS.			JA'GHIR LANDS.			TOTAL.			PERCENTAGE.	
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
Begari Canals ...	192,419	25,738	222,165	67,026	2,040	69,066	266,445	27,776	294,521	91	9
Shikarpur Canals ...	93,425	27,316	121,341	9,031	3,917	11,948	101,466	31,533	133,269	76	24
Ghâr ...	235,107	80,343	313,350	8,667	13,296	21,963	246,774	96,539	340,313	72	28
Western Nâra ...	154,310	62,747	217,057	10,259	12,263	22,547	164,569	75,935	239,604	69	31
Eastern Nâra ...	155,200	66,172	223,372	1,727	3,193	4,920	156,927	71,265	228,292	69	31
Hyderabad Canals ...	239,236	30,016	359,252	49,546	2,167	51,712	378,791	32,183	410,964	92	8
Fuleli ...	252,773	43,310	296,083	60,779	6,217	56,996	200,553	49,527	359,079	56	44
Karachi ...	174,469	30,078	194,547	7,307	1,557	9,164	131,776	21,935	158,711	90	10
Total ...	1,566,939	358,218	1,945,157	203,341	44,975	248,316	1,800,230	403,193	2,203,423	83	16
Percentage ...	81.7	18.3	100.0	81.9	18.1	100.0	81.7	18.3	100.0		

The percentage of rabi is largest in the Shikarpur, Ghâr, Western and Eastern Nâra districts affected by floods: the rabi cultivation in the flooded areas is obviously not properly due to the canals: most of the rabi cultivation in the Karachi District is also on flooded lands. The percentage is lowest in the Begari and Hyderabad Canals District, where less than a tenth of the cultivation is rabi.

13. The extension of the means of rabi cultivation, where possible, in districts either not liable to, or protected from, floods, would unquestionably be of great advantage to the Province. The net increase of 197,892 acres under rabi in 1890-91 as compared with 1886-87, noticed in paragraph 7 of the Commissioners Report No. 748 of 1892 (pages 79 and 80 of the Revenue Report), must be regarded as highly satisfactory. The additional regulators lately sanctioned for the Fuleli and other improvements projected will largely increase the water supply available for rabi cultivation on that system of canals.

14. In compliance with paragraph 28 of Government Resolution No. 51 W.I.—721, dated 31st March 1890, a return has been furnished and is printed as an accompaniment to the report, showing for 5 years ending 1890-91 the areas of the principal crops irrigated by flow and lift respectively on the several canals in each district in each season. It is noted that the totals do not agree in some cases with those recorded in the revenue reports, and a corrected statement is promised with the next report. This is an important return, and when corrected and submitted complete, will form a valuable addition to the series of tables which accompany the reports. In the form in which it is now presented the information is of less interest than it might be. It refers to Government lands only and altogether excludes the considerable area (248,316 acres) classed as jâghir, including under that head the area (63,744 acres) irrigated by Government canals in Khelât territory. It is desirable that, if possible, the returns should in future include the areas classed as jâghir as well as the Government lands, and the attention of the Commissioner should be drawn to this point.

15. The following is an abstract compiled from this return showing the proportion of flow to lift cultivation for each canal district for the year 1890-91:—

Canal District.	Lift.	Flow.	Total.	PERCENTAGE.		
				Lift.	Flow.	Total.
	Acres.	Acres.	Acres.			
Begári Canals ...	32,065	193,090	225,155	14	86	100
Shikárpur do. ...	21,851	99,490	121,341	18	82	100
Ghár do. ...	15,458	302,892	318,350	5	95	100
Western Nára ...	56,785	160,272	217,057	26	74	100
Eastern Nára ...	51,417	171,955	223,372	23	77	100
Hyderabad Canals ...	308,218	51,024	359,242	86	14	100
Fuleli Canals ...	95,299	200,784	296,083	32	68	100
Karáchi do. ...	29,767	164,772	194,539	16	84	100
Total Acres ...	610,860	1,344,279	1,955,139	31	69	100

NOTE.—There is a discrepancy in the total of 18 acres only, which is due to differences of 8 and 10 acres respectively in the figures for the Kalri in the Karáchi district and those for "other canals" under Hyderabad.

Approximately rather more than $\frac{2}{3}$ of the whole cultivation on Government lands is by flow, but in the case of the Shikárpur, Ghár, Western Nára, Fuleli, Eastern Nára and Karáchi District, the flow area includes that cultivated on flooded lands; the proportion of lift varies from 5 per cent. in the Ghár Canals to as much as 96 per cent. in the Hyderabad Canals district, the average being 31 per cent.

The inclusion of large areas cultivated on spill and flood water in the flow figures renders those figures misleading, and the Commissioner should be asked whether to increase the reliability of the statement it is possible to distinguish 'flood' and 'spill' irrigation from 'flow.' The case of the Hyderabad district is quite distinct from that of any other part of Sind, the lands lying high and out of the reach of floods.

16. The following abstract compiled from the same return shows the areas of the principal crops irrigated during 1890-91:—

Name of Crops.	NAME OF CANAL DISTRICT.								Total.
	Begári.	Shikárpur.	Ghar.	Western Nára.	Eastern Nára.	Hyderabad.	Fuleli.	Karáchi.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Rice... ..	5,163	32,664	159,405	72,413	80,065	1,858	145,025	142,477	640,070
Juári	133,798	50,613	61,114	66,028	1,130	82,030	3,659	2,343	401,215
Báiri	26,532	3,124	6,014	4,792	39,406	129,177	79,060	21,674	339,899
Cotton	680	1,039	449	413	25,673	44,075	13,851	288	86,468
Other crops ...	33,246	4,985	11,125	2,685	8,536	42,086	11,148	7,187	121,295
Total, Kharif ...	199,419	93,425	238,107	146,331	155,200	329,226	252,773	174,469	1,588,950
Wheat	10,845	22,064	51,244	38,150	33,081	16,164	9,356	1,672	182,576
Barley	367	144	1,112	2,839	384	355	2,566	4,546	12,313
Oil-seeds	7,771	3,060	22,476	12,002	22,445	7,111	19,606	6,124	100,595
Other crops ...	6,753	2,648	5,411	6,995	12,262	6,389	11,782	7,728	59,965
Total Rabi ...	25,736	27,916	80,243	59,986	68,172	30,016	43,310	20,070	355,449
Total, Kharif and Rabi...	225,155	121,341	318,350	206,317	223,372	359,242	296,083	194,539	1,944,399

NOTE.—There are the same discrepancies in this statement as those noted at the foot of the table in paragraph 15, but in addition this table excludes 10,740 acres irrigated by the Dadu Canals now included in the Western Nára district, which are not shown in the crop statement.

Rice is the staple kharif crop in all the districts except the Begári and Hyderabad Canals; in the former juári and in the latter báiri take its place. Juári is also extensively cultivated in the Shikárpur, Ghar, Western Nára, and báiri in the Eastern Nára and Fuleli districts. Cotton is most extensively cultivated in the Hyderabad Canals and Eastern Nára districts. The increase in rice cultivation on the Ghar Canal noticed in last year's review still continues, the area of that crop in 1890-91 having been 129,785 acres against 97,676 acres in 1889-90. There was a similar increase in the area of this crop on the Western Nára, on which canal there was also a large increase in the area of juári irrigated by lift.

Wheat and oil-seeds are the staple rabi crops in all the districts.

17. For the purposes of the above abstracts the crop return for 1890-91 has been re-cast, and as the information is of considerable interest the return in detail is printed as an annexure to this resolution (Statement A).

18. The gross revenue as compared with the previous year was as follows : —

	1890-91.	1889-90.	Increase.	Decrease.
<i>Government Land.</i>	Rs.	Rs.	Rs.	Rs.
Consolidated assessments ...	50,98,756	53,26,693	.....	2,27,937
<i>Deduct—</i>				
Remissions ...	67,845	2,33,442	.....	1,65,597
Net consolidated assessments ...	50,30,911	50,93,251	.....	62,340
<i>Deduct—</i>				
Land share ...	5,03,096	5,09,319	.....	6,223
Irrigation share of net consolidated assessments ...	45,27,815	45,83,932	.....	56,117
<i>Jághir Land.</i>				
Assessments on Khelát lands ...	63,747	79,983	.....	16,236
Do. on British Jághir lands ...	69,297	62,836	6,461	.....
	1,33,044	1,42,819	.....	9,775
<i>Deduct—</i>				
Remissions ...	.....	1,590	.....	1,590
	1,33,044	1,41,229	.....	8,185
Total net assessed revenue ...	46,60,859	47,25,161	.....	64,302
Miscellaneous receipts—Actuals ...	55,105	55,167	.....	62
Total Canal revenue Rs. ...	47,15,964	47,80,328	.....	64,362

The heavy remissions in 1889-90 were principally (3rds) due to the heavy floods of that year : in the year under report only Rs. 30,875 were due to that cause : Rs. 10,555 were due to the ravages of rats and Rs. 9,936 are said to be attributable to alterations in the settlement. Only the trifling sum of Rs. 3,590 were remitted for deficient water supply.

19. The comparison between assessments and realizations stands as follows : —

	Government Lands.	Khelát Lands.	British Jághir.	Total.
	Rs.	Rs.	Rs.	Rs.
Unrealised balance at the end of 1889-90 ...	71,920	12,758	14,369	99,047
<i>Deduct—</i>				
Remissions on account of former years ...	8,251	.....	.....	8,251
	63,669	12,758	14,369	90,796
Assessments during year ...	50,30,911	63,747	69,297	51,63,955
Total for collection ...	50,94,580	76,505	83,666	52,54,751
Actual receipts ...	50,09,113	52,770	68,219	51,30,102
Balance outstanding ...	85,467	23,735	15,447	1,24,649

The balances shown as outstanding at the beginning of the year differ slightly from those shown in last year's report. In the case of Government lands this is explained in paragraph 6 of the Commissioner's report: the small difference in the case of jágghir lands is not explained.			
	Now shown.	Shown in last year's report.	Difference.
	Rs.	Rs.	Rs.
Government lands	71,920	72,127	207
Khelát do.	12,758	12,758	...
Jágghir do.	14,369	14,262	107

It is stated that a portion of the balances outstanding represents remissions which were not punctually disposed of: some have been recovered and only a small part represents real postponements due to special causes. This applies to the collections in Government lands. The arrears in Khelat are considerable and from the Superintending Engineer's report it appears that Rs. 10,035 of the amount are not likely to be recovered. It is very desirable that all claims for remissions, whether in British or Khelát territory, should be settled before the close of the year. The outstandings in the case of British jágghir lands are also proportionately considerable, but the Commissioner states that measures are now being taken for more accurately effecting the assessment as well as the collection of these receipts.

	Rs.	20. The irrigation share of the actual collections in Government lands amounted to Rs. 45,08,201* and the total canal revenue on the basis of the actual realisations thus amounted to—
*Gross	50,09,113	
Deduct land share... ..	5,00,912	
	<u>45,08,201</u>	

	Rs.	Rs.
Government lands	...	45,08,201
Khelát lands	...	52,770
British Jágghir	...	68,219
Add—Difference on account of annas...	...	2
Realised by Public Works Department	...	399
		<u>1,21,390</u>
Miscellaneous receipts	...	55,105
		<u>46,84,696</u>
Total Rs.		46,84,696

against Rs. 47,64,000 realized in 1889-90.

21. There remains the credit for interest on the irrigation share of the proceeds of the sales of occupancy in lands benefited by the canals. The report shows that 35,207 acres were sold during the year and realized Rs. 1,10,532, four per cent. on the irrigation share ($\frac{2}{10}$ ths) of which amounts to Rs. 3,979. The Commissioner, in paragraph 8 of his memorandum, appears to overlook that this credit is obviously a cumulative one and the amount due for 1890-91 added to the credit in 1889-90 is equal to Rs. 15,051 against Rs. 15,066 actually credited, so that there is a discrepancy of Rs. 15 only, of which Rs. 13 is due to an error which will be adjusted in 1891-92 and Rs. 2 is due to omission of fractions.

22. With this addition the actual credits to the canals for 1890-91 aggregated Rs. 46,99,762. This amount is accounted for as follows:—

Exhibited in the Examiner's General Abstract of Financial results.

Works for which Capital and Revenue Accounts are kept—	Rs.	Rs.
Major Works	9,10,710	
Minor Works	13,43,223	
		<u>22,53,933</u>
Works for which only Revenue Accounts are kept		20,33,151
Ordinary Agricultural Works for which no Capital or Revenue Accounts are kept		9,671
		<u>42,96,755</u>
Total shown in the Accounts	Rs. 42,96,755	
Add—Net revenue due to certain of the works before improvement...		<u>4,03,007</u>
		<u>Rs. 46,99,762</u>

23. The deduction of the former net revenue on works which have been improved is necessary for the purpose of showing the financial result of the capital expenditure on their improvement, but for all other purposes the figures

should appear as a whole as they do in the several statements accompanying the Superintending Engineer's report. The entire exclusion of the revenue before improvement from the general abstract of financial results is an obvious defect in the accounts regarded as a complete epitome of the financial operations of the year, and the difference which results between the Examiner's accounts and the statistical tables is perplexing as well as incorrect in principle. The Examiner's attention should be drawn to the instructions on this subject contained in this Government's letter No. 690-I of 17th November 1890, which have not been given effect to in the accounts for the year under review. The Government of India have since drawn attention to the matter and have suggested an alternative method of dealing with it, and it is hoped the anomaly will disappear from future reports.

24. The entire expenditure of the year is shown in the Examiner's general abstract of financial results to have been—

<i>Capital—</i>					Rs.
Major Works ...	...	...	...	...	81,445
Minor Works ...	...	...	...	...	21,458
					1,02,903
<i>Revenue—</i>					
Major Works ...	...	...	...	...	2,93,996
Minor Works: Works for which Capital and Revenue					
Accounts are kept ...	...	...	...	...	5,54,878
					8,48,874
Works for which only Revenue Accounts are kept ...					10,05,219
Ordinary Agricultural Works for which no Capital or					
Revenue Accounts are kept ...	...	...	...	...	2,33,753
Total, Revenue Expenditure ...					20,87,846
Total Expenditure ...					21,90,749

The total revenue expenditure differs from that shown in Table No. IV of the Superintending Engineer's report by Rs. 19,515, the amount of the indirect charges charged to the revenue accounts of works for which capital accounts are kept.

25. The following abstract gives the details of the expenditure of the year on each class of canals :—

	DIRECT CHARGES.					INDIRECT CHARGES.			Revenue Collection.	Grand Total.
	Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Leave and Pension Allowances.	Capitalization.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
CAPITAL EXPENDITURE.										
Major Works ...	63,661	...	14,698	1,028	79,387	2,058	...	2,058	...	81,445
Minor Works ...	17,474	...	3,495	...	20,969	489	...	489	...	21,458
Total, Capital Outlay ...	81,135	...	18,193	1,028	1,00,356	2,547	...	2,547	...	1,02,903
REVENUE EXPENDITURE.										
Major Works ...	21,424	1,29,054	47,827	1,429	2,00,630	6,984	...	6,984	86,382	2,93,996
Minor Works—										
Works for which Capital and Revenue Accounts are kept ...	274	3,41,569	66,289	1,060	4,09,192	9,280	3,251	12,531	1,33,155	5,54,878
Works for which only Revenue Accounts are kept ...	2,17,208	4,38,292	1,46,673	1,513	8,03,586	...	...	...	2,01,633	10,05,219
Agricultural Works for which neither Capital nor Revenue Accounts are kept ...	1,18,714	67,500	49,556	2,152	2,32,922	...	...	...	831	2,33,753
Total, Minor Works ...	3,31,196	8,47,361	2,62,418	4,725	14,45,700	9,280	3,251	12,531	3,35,619	17,93,850
Total, Revenue Expenditure ...	3,52,620	9,77,315	3,30,241	6,154	16,46,330	16,264	3,251	19,515	4,22,001	20,87,846
Grand Total Outlay, 1890-91 ...	4,33,755	9,77,315	3,28,434	7,182	17,46,686	18,811	3,251	22,062	4,22,001	21,90,749
Grand Total Outlay, 1889-90 ...	4,21,604	9,65,517	3,37,693	8,731	17,36,545	18,809	1,217	20,026	4,26,192	21,82,763

26. The capital expenditure under the head Major Works was slightly more than in the previous year, and was incurred wholly on the Eastern Nara works: a regulator was under construction across the Jamrao Sang, designed to restore the cultivation on that depression from surplus waters in the Eastern Nara and at the same time to serve as an escape, under control, for floods: the extension of the Dimwah and Kipra Canal and the embankment of the Nara river from Kipra to opposite the head of the Thar Canal were also in progress.

27. On Minor Works the outlay under capital was considerably less than in the previous year, and was wholly on improvements to the Fuleli, a list of which is given in paragraph 21 of the Superintending Engineer's Report. It would be convenient if in future some descriptive particulars were given of the works carried out, showing the extent to which they are designed to improve the working of the canals.

28. The outlay on extensions and improvements amounted to Rs. 3,52,620 as compared with Rs. 3,18,798 in 1889-90 and with Rs. 1,32,558 in 1888-89. This expenditure during the year included Rs. 1,27,891 for the safety of the existing river embankments: Rs. 1,73,549 for the Pritchard Canal designed to increase the supply in the Western Nara and Rs. 46,180 for improvements to other canals. Reference is made to the insufficiency of this latter amount, and the matter should be pressed on the attention of the Government of India. Money can be spent to great advantage on improvements, but obviously with a restricted total assignment from the Government of India, it is impossible for this Government to provide for large works like the Pritchard Canal and at the same time make large grants for repairs and *also* for minor improvements to other works. It is observed, however, that plans and estimates for such improvement schemes are not in readiness. Every project of the kind which has reached Government up to date has been sanctioned and funds have been found.

29. The expenditure on repairs as compared with the previous two years and with the normal estimate of requirements was as follows:—

	Major Works.	MINOR WORKS.		Total.
		Canals.	Bunds.	
	Rs.	Rs.	Rs.	Rs.
Outlay in 1890-91	1,29,954	7,26,755	1,20,606	9,77,315
" " 1889-90	1,52,102	7,12,810	1,00,605	9,65,517
" " 1888-89	1,22,142	6,81,014	1,17,293	9,20,449
Normal Estimate	1,31,000	6,46,000	1,23,000	9,00,000

The total outlay was larger than in any previous year except 1887-88, and as compared with that year, the outlay on canals under the head Minor Works was less by Rs. 10,622 only. As compared with last year the outlay on canals of that class was larger by Rs. 13,945. The figures for each district compare as follows:

Outlay on repairs to Canals in 1890-91 as compared with 1889-90.

	Increase. Rs.	Decrease. Rs.
Shikárpur Canals	...	7,958
Ghár "	...	10,192
Western Nara	75,522	"
Hyderabad "	6,898	"
Fuleli "	...	15,774
Karáchi "	...	34,551
	82,420	68,475
	68,475	
Net Increase	13,945	

The increase may be wholly set down to the Pritchard Canal, the expenditure on repairs to which amounted to Rs. 15,603. The large increase shown under Western Nara, excluding this item, is partly nominal, as it is a newly

formed district and against it are to be set the decreases in the Ghár and Karáchi Districts. (See table in paragraph 36 of this Resolution which gives the figures separately.)

30. Under the head Repairs to bunds a noticeable feature is the increased expenditure on repairs to bunds in the Karáchi District, which amounted to Rs. 51,563 against Rs. 21,278 in 1889-90. The report on the value of these bunds taking into consideration their cost as compared with the permanent benefit they effect has not yet been submitted and should be expedited.

31. The outlay on Establishment is commented on in the Superintending Engineer's report paragraph 22. There is a discrepancy in the totals as there given and as shown in Table IV and in the abstract in paragraph 24 of this Resolution of Rs. 2,062, due apparently to revenue establishments on Khelat lands charged to the Begari and Desert Canals being shown in the latter statements under revenue collection. Such discrepancies should either be avoided or explained. Table IV should show Tools and Plant charges separately from those for establishment.

32. The report bears evidence of continued watchful control on the part of the Superintending Engineer over the Abkalani and Work establishment charges, the total outlay on which shows some further reduction. The abstract of repair outlay given in paragraph 18 is a useful addition to the report showing in a tabular form what was accomplished under the several headings for the expenditure incurred.

33. The following table recapitulates the financial results of the year :—

	Gross Revenue.	Working expenses.	Percent- age.	Net Revenue.	Percent- age.
	Rs.	Rs.		Rs.	
Major Works	9,39,010	2,93,996	31	6,45,014	23
Minor Works—					
Works for which capital and revenue accounts are kept.	17,17,930	5,54,878	32	11,63,052	41
Works for which only revenue accounts are kept.	20,33,151	10,05,219	49	10,27,932	36
	46,90,091	18,54,093	40	28,35,998	100
Agricultural works	9,671	2,33,753	...	2,24,082	...
Total, 1890-91	46,99,762	20,87,846	44	26,11,916	...
„ 1889-90	47,75,069	20,48,415	43	27,26,654	...
Increase ... ..	.....	39,431	...	.....	...
Decrease	75,307	.....	...	1,14,738	...

As compared with the previous year the Major Works show a decrease in net revenue of Rs. 1,10,293, due to changes in the river affecting the Begari Canals and Unharwah and to the decrease in rabi cultivation on flooded lands in the Eastern Nara Valley. The Minor Works taken all together show a decrease of only Rs. 4,445 and taken separately the results are :—

	Increase. Rs.	Decrease. Rs.
Works for which capital and revenue accounts are kept	57,875	.....
Works for which only revenue accounts are kept ... ..	.....	19,178
Agricultural works ... ..	.....	43,142
	57,875	62,320
		57,875
Net decrease		4,445

34. This comparison is however affected by the transfer of the charges for river embankments on the right bank to the head Ordinary Agricultural Works. The receipts and charges so transferred were as follows :—

					Receipts,	Charges.
					Rs.	Rs.
Sukkur Begāri bund	...	...	...	...	398	35,946
Ghār bund	...	...	...	...	213	52,954
Nāra do.	...	...	...	...	82	12,249
Total					693	1,01,149

This affects the capital account works in respect of the bunds formerly debited to the Ghār Canal and the class of works for which only revenue accounts are kept in respect of the other bunds, but the figures are not shown in a way that will allow of a correction in the comparison. This difficulty will not arise in future, as the present system will continue.

35. The increase in the case of capital account works was principally on the Fuleli (Rs. 39,818) and Ghār Canal (Rs. 34,611), the latter being partly due to the transfer above referred to. There was a decrease in the net revenue on the Great Marak of Rs. 23,882, due partly to the falling off in cultivation and

revenue noticed in paragraph 25* of the Commissioner's memo, but principally to an increase (Rs. 14,573) in the expenditure on repairs.

36. The following table explains the decrease shown under Works for which only revenue accounts are kept :—

		1890-91.			1889-90.			Increase	Decrease.
		Revenue.	Expenditure.	Net Revenue.	Revenue.	Expenditure.	Net Revenue.		
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Shikarpur Canals	...	3,48,737	1,08,257	2,40,480	3,61,110	1,24,618	2,36,492	3,988	...
Western Nāra Canal	...	5,43,172	3,28,267	2,14,905	5,53,721	2,26,138	3,57,583	...	1,42,678
Wahur	...	15,308	4,198	11,110	16,830	4,120	12,710	...	1,600
Marvi	...	12,664	3,353	9,311	11,591	2,668	8,923	388	...
Phitta	...	16,342	5,733	10,609	11,708	4,791	6,917	3,692	...
Canals north of Kotri.	...	19,676	12,998	6,678	36,942	16,334	20,608	...	2,275
Dadu Canals	...	17,864	6,209	11,655					
Other Canals, Karachi District	...	4,14,430	2,61,390	1,53,040	4,19,274	2,31,385	1,87,889	...	34,849
Hyderabad Canals	...	5,98,330	2,39,523	3,58,807	5,68,295	2,78,584	2,89,711	69,096	...
Fuleli (other) Canals	...	46,628	35,291	11,337	56,242	34,667	21,575	...	10,238
River embankments		20,33,151	10,05,219	10,27,932	20,65,713	9,23,305	11,42,408	...	1,14,476
Refunds &c.		20,33,151	10,05,219	10,27,932	20,67,249	10,20,139	10,47,110	...	19,178
		...	...	...	—3	—3	...	...	...
		20,33,151	10,05,219	10,27,932	20,67,246	10,20,136	10,47,110	...	19,178

In comparing these results with those shown above for Capital Account works it must be borne in mind that in the former case the Revenue Account of the year is charged with the whole outlay on improvements which in the latter case would be charged to capital. It will be observed that the actual decrease, eliminating that due to the transfer of charges for river embankments, was in

this case Rs. 1,14,476, due partly to the expenditure on the construction and subsequent clearance of the Pritchard Canal (Western Nára) and partly to a falling off in the revenue on this canal and on the other canals in the Fuleli District (excluding the Fuleli proper) and also to the increased expenditure in the Karáchi District on river embankments (see paragraph 30) which in that district still continue to be charged for as pertaining to the canals. There was a satisfactory increase in the revenue from canals of this class in the Hyderabad District, and the expenditure having been smaller than in the previous year the net revenue shows considerable improvement. The expenditure on the "other canals" in the Fuleli District bears a higher proportion to the revenue even than in 1889-90.

37. The financial results of the capital account works for the year was as follows :—

				During the year.	To the end of the year.
<i>Major Works.</i>				Rs.	Rs.
Capital outlay	...	...	...	81,445	85,88,747
Gross revenue (realizations)...	...	...	...	9,39,010	.....
Deduct—Previous net revenue	...	...	...	28,300	.....
Gross revenue due to capital outlay	...	...	...	9,10,710	1,32,01,331
Revenue charges...	...	...	...	2,93,996	56,55,863
Net Revenue				6,16,714	75,45,468
Simple Interest				3,30,616	57,26,994
Net profit after paying interest				2,86,098	18,18,474
<i>Minor Works.</i>					
Capital outlay	...	...	...	21,458	33,50,535
Gross revenue (realizations) ...	...	...	...	17,17,930	.....
Deduct—Previous net revenue	...	...	...	3,74,707	.....
Gross revenue due to capital outlay	...	...	...	13,43,223	2,24,20,501
Revenue charges...	...	...	...	5,54,878	1,03,55,401
Net Revenue				7,88,345	1,20,65,100
<i>Total Major and Minor Works.</i>					
Capital outlay	...	...	...	1,02,903	1,19,39,280
Net Revenue after deducting working expenses				14,05,059	1,96,10,568

38. Taken all together the net revenue realised amounted to Rs. 14,05,059 or 11·87 per cent. on the gross capital outlay to the end of the previous year (Rs. 1,18,36,377), which result must be regarded as very satisfactory and the figures showing the results to the end of the year establish beyond question the profitableness of expenditure on works in Sind.

39. The profit from the Major Works, after paying interest, was Rs. 2,86,098 as compared with Rs. 3,99,215 in 1889-90 and with Rs. 3,92,092 in 1888-89, the decline being due to temporary causes affecting the supply, already alluded to.

40. The net revenue from Minor Works was Rs. 7,88,345 as compared with Rs. 7,30,470 in the previous year and with Rs. 5,12,474 in 1888-89. The improvement in this case is due to causes already explained (paragraph 35). The accounts of the Mehrabwah require correction as the Revenue Account in that case shows the whole revenue of the canal as due to the improvements carried out in 1883-84; the previous net revenue should be deducted as in other instances.

41. Table VIII, so far as it relates to the nature of the crops irrigated, has been superseded by the crop return dealt with in paragraphs 14—17 of this resolution. There are some discrepancies in the figures given in the two statements which should be cleared up. The duty of the water varied from 26 to nearly 60 acres per cubic foot per second. The following gives a comparison with the figures for the previous year on some of the principal canals:—

Name of Canal.	Area irrigated per cubic foot per second.	
	1889-90.	1890-91.
Desert Canal	43.58	54.20
Begári „	47.21	47.03
Sukkur „	27.01	33.98
Ghár „	36.57	32.17
Mithráu „	42.73	34.37
Fuleli „	28.71	32.76

The average discharges from which this information was deduced were:—

	Cubic feet per second.	
	1889-90.	1890-91.
Desert Canal	2,608	2,118
Begári „	4,110	3,146
Sukkur „	2,433	1,756
Ghár „	5,053	5,817
Mithráu „	2,308	2,650
Fuleli „	9,661	8,737

With the exception of the Ghár and the Mithráu the discharge was, in each case, less and the duty per cubic foot was higher than in the previous year. The decrease in average discharge illustrates the difference between the two inundations. The increase of rice cultivation would account for a fall in the duty of the water per cubic foot on the Ghár Canal.

42. There is no objection to the report being submitted by the Commissioner in print in future provided it is printed in exact uniformity with previous reports.

43. Effect should be given to the suggestion in paragraph 26 of the Commissioner's memorandum that future reports should show the figures of cultivation and revenue on the Munchur Lake separately.

44. Mr. Thompson may be thanked for the report which is clear and concise and for his services in the post of Superintending Engineer during the year. The results of the year are creditable alike to him and to the officers of both Revenue and Public Works Department in Sind.

C. T. BURKE,

Under Secretary to Government,

To

The Revenue Department, Secretariat, The Political Department, Secretariat, The Commissioner in Sind, The Survey and Settlement Commissioner, The Superintendent, Sind Revenue Survey, The Chief Engineer, N. D., The Superintending Engineer, C. D., The Superintending Engineer, S. D., The Superintending Engineer in Sind, The Director of Land Records and Agriculture, The Examiner of Public Works Accounts, The Editor's Table.	}	With copies of report.
The Government of India, The Secretary of State for India.	}	by letter.

STATEMENT A.

ANNEXURE

TO

GOVERNMENT RESOLUTION No. 98 W. I.—1016,

DATED 28TH JUNE 1892,

ON

ANNUAL REVENUE REPORT OF IRRIGATION
WORKS IN SIND,

1890-91.

CROP RETURN.

1	BEGARI CANALS.					SHIKARPUR CANALS.		
	Desert Canal.	Unharwah.	Begari.	Kashmer Bund.	Total Begari Canals.	Canals in Robri.	Sind Canal.	Total Shikarpur Canals.
	2	3	4	5	6	7	8	9
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Rice ... { Lift ...	...	...	...	...	...	18	...	18
Flow ...	541	192	4,414	16	5,163	11,391	22,255	33,646
Total ...	541	192	4,114	16	5,163	11,409	22,255	33,664
Judri ... { Lift ...	7,421	2,147	16,084	1	25,653	6,927	11,784	18,711
Flow ...	53,104	7,873	46,838	330	1,08,145	20,565	11,337	31,902
Total ...	60,525	10,020	62,922	331	1,33,798	27,492	23,121	50,613
Bajri ... { Lift ...	786	975	2,312	2	4,575	604	535	1,139
Flow ...	7,545	4,525	9,582	305	21,957	1,634	331	1,965
Total ...	8,331	5,500	12,394	307	26,532	2,258	866	3,124
Cotton... { Lift ...	...	2	2	...	4	162	41	203
Flow ...	55	109	245	267	676	719	117	836
Total ...	55	111	247	267	680	881	158	1,039
Other crops ... { Lift ...	103	155	1,311	...	1,569	63	881	944
Flow ...	8,039	1,888	21,341	409	31,677	1,155	2,886	4,041
Total ...	8,142	2,043	22,652	409	33,246	1,218	3,767	4,985
Total, Kharif... { Lift ...	8,310	3,279	20,209	3	31,801	7,774	13,241	21,015
Flow ...	69,234	14,587	82,420	1,327	1,67,618	35,484	36,926	72,410
Total ...	77,544	17,866	1,02,629	1,330	1,99,419	43,258	50,167	93,425
Wheat... { Lift ...	...	...	31	...	31	215	263	478
Flow ...	2,840	1,669	3,360	2,945	10,814	14,452	7,134	21,586
Total ...	2,840	1,669	3,391	2,945	10,845	14,667	7,397	22,064
Barley... { Lift ...	...	...	40	...	40	25	10	35
Flow ...	6	8	261	52	327	84	25	109
Total ...	6	8	301	52	367	109	35	144
Oil-seeds ... { Lift ...	...	...	133	...	133	41	61	102
Flow ...	1,194	1,062	5,312	70	7,638	756	2,202	2,958
Total ...	1,194	1,062	5,445	70	7,771	797	2,263	3,060
Other crops ... { Lift ...	...	1	58	1	60	16	205	221
Flow ...	34	84	6,414	161	6,693	756	1,671	2,427
Total ...	34	85	6,472	162	6,753	772	1,876	2,648
Total, Rabi ... { Lift ...	...	1	262	1	264	297	539	836
Flow ...	4,074	2,823	15,347	3,228	25,472	16,048	11,032	27,080
Total ...	4,074	2,824	15,609	3,229	25,736	16,345	11,571	27,916
Total, Kharif and Rabi { Lift ...	8,310	3,280	20,471	4	32,065	8,071	13,780	21,851
Flow ...	73,358	17,410	97,767	4,555	1,93,090	51,532	47,958	99,490
Total ...	81,668	20,690	1,18,238	4,559	2,25,155	59,603	61,738	121,341

GHAR CANALS.			WESTERN NARA.					EASTERN NARA.		
Sukkur Canal.	Ghar Canal.	Total Ghar Canals.	Western Nara.	Wahur.	Marvi.	Phitta.	Total Western Nara.	Nara Supply Channel.	Eastern Nara.	Mithran Canal.
10	11	12	13	14	15	16	17	18	19	20
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
8 29,612	...	8 1,59,397	42 71,767	8 ...	57 ...	539 ...	42 72,371	...	5,795 ...	...
29,620	1,29,785	1,59,405	71,809	8	57	539	72,413	...	5,795	49,729
6,332 12,081	2,540 40,161	8,872 52,242	20,663 55,232	1,066 2,484	1,677 533	2,977 1,336	26,383 39,645	58 18	10 26	339 93
18,413	42,701	61,114	55,895	3,560	2,260	4,313	66,028	76	36	432
621 1,026	547 3,820	1,168 4,846	2,164 1,570	404 403	52 8	191 ...	2,811 1,981	2 ...	355 5,709	14,661 4,583
1,647	4,367	6,014	3,734	807	60	191	4,792	2	6,064	19,244
55 156	28 210	83 366	205 169	5 26	2 1	14 ...	226 187	...	27 989	11,824 4,485
211	238	449	365	31	3	14	413	5	1,016	16,309
1,405 6,844	328 2,548	1,733 9,392	280 2,308	8 12	14 11	20 32	322 2,363	23 2	43 550	2,558 2,816
8,249	2,876	11,125	2,588	20	25	52	2,685	25	593	5,374
8,421 49,719	3,443 1,76,524	11,864 2,26,343	23,354 1,11,037	1,483 2,943	1,745 660	3,202 1,907	29,784 1,16,547	83 25	435 13,069	29,382 61,706
58,140	1,79,967	2,38,107	1,34,391	4,426	2,405	5,109	1,46,331	108	13,504	91,088
2,620 17,812	405 30,407	3,025 48,219	16,907 17,554	4 1,236	191 981	1,277 ...	13,379 19,771	102 5,046	164 9,057	7,153 8,445
20,432	30,812	51,244	34,461	1,240	1,172	1,277	38,150	5,148	9,221	15,598
22 132	4 954	26 1,086	1,506 1,016	1 23	22 55	...	1,529 1,310	...	10 47	160 112
154	958	1,112	2,522	24	77	216	2,839	...	57	272
335 4,970	89 17,082	424 22,062	1,674 9,318	...	4 473	34 117	1,712 10,290	...	55 15,948	1,095 2,145
5,305	17,171	22,476	10,992	382	477	151	12,002	578	16,003	3,240
101 1,222	18 4,070	119 5,292	1,382 5,258	...	...	238 ...	1,620 5,375	6 203	61 11,245	61 307
1,323	4,688	5,411	6,640	114	3	238	6,995	209	11,306	368
3,078 24,136	516 52,513	3,594 76,649	21,469 33,146	5 1,755	217 1,512	1,549 333	23,240 36,746	108 5,827	290 36,297	8,469 11,009
27,214	53,029	80,243	54,615	1,760	1,729	1,882	59,986	5,935	36,587	19,478
11,499 73,855	3,059 2,29,087	15,458 3,02,892	44,823 1,44,183	1,488 4,693	1,962 2,172	4,751 2,240	53,024 1,53,293	191 5,852	725 49,366	37,851 72,715
85,354	2,32,998	3,18,350	1,89,006	6,186	4,134	6,991	2,06,317	6,043	50,091	1,10,566

	EASTERN NARA—continued.							
	Dimwah.	Heranwah.	Khijra Canal.	Thar Canal.	Total Eastern Nara.	Mehrabwah.	Nasrat.	Naolaukhi.
1	21	22	23	24	25	26	27	28
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Rice ... { Lift ...	...	...	...	...	...	...	9	4
Flow ...	...	...	150	24,382	80,065	71	303	452
Total ...	...	...	150	24,382	80,065	71	312	456
Juári ... { Lift ...	147	73	8	205	840	6,026	10,215	19,714
Flow ...	106	5	24	18	290	220	3,487	7,431
Total ...	253	78	32	223	1,130	6,846	13,702	27,145
Bajri ... { Lift ...	2,810	829	227	2,011	20,895	2,941	1,688	5,590
Flow ...	1,314	290	5,285	1,420	18,601	59	178	828
Total ...	4,124	1,119	5,512	3,431	39,496	3,000	1,866	6,418
Cotton... { Lift ...	1,415	431	33	1,800	15,530	147	203	285
Flow ...	350	1	806	3,498	10,143	...	70	77
Total ...	1,774	432	839	5,298	25,673	147	273	362
Other crops ... { Lift ...	374	126	50	753	3,927	1,007	1,305	5,989
Flow ...	214	345	481	551	4,909	643	2,108	3,236
Total ...	588	471	481	1,304	8,836	1,650	3,413	9,225
Total, Kharif... { Lift ...	4,746	1,459	318	4,769	41,192	10,721	13,420	31,582
Flow ...	1,993	641	6,705	29,869	1,14,008	993	6,146	12,024
Total ...	6,739	2,100	7,023	34,638	1,55,200	11,714	19,566	43,606
Wheat... { Lift ...	178	96	2	664	8,359	922	1,781	1,918
Flow ...	10	139	698	1,327	24,722	16	1,466	2,125
Total ...	188	235	700	1,991	33,081	938	3,247	4,043
Barley ... { Lift ...	...	...	...	16	186	11	29	50
Flow ...	...	...	9	30	198	1	7	53
Total ...	...	...	9	46	384	12	36	103
Oil-seeds ... { Lift ...	25	1	5	307	1,488	258	236	132
Flow ...	320	3	1,510	453	20,957	5	159	204
Total ...	345	4	1,515	760	22,445	263	395	336
Other crops ... { Lift ...	...	...	...	64	192	80	59	126
Flow ...	...	1	26	288	12,070	3	161	288
Total ...	...	1	26	352	12,262	83	220	414
Total, Rabi ... { Lift ...	203	97	7	1,051	10,225	1,271	2,105	2,226
Flow ...	330	143	2,243	2,098	57,947	25	1,793	2,670
Total ...	533	240	2,250	3,149	68,172	1,296	3,898	4,896
Total, Kharif and Rabi, { Lift ...	4,949	1,556	325	5,820	51,417	11,992	15,525	33,808
Flow ...	2,323	784	8,948	31,967	1,71,955	1,018	7,939	14,694
Total ...	7,272	2,340	9,273	37,787	2,23,372	13,010	23,464	48,502

HYDERABAD CANALS.

Dambro.	Dadwah.	Renwah.	Alibhar Kacheri.	Marak.	Gharo Muhunda.	Kari Shumali.	Nasir.	Saifraz.	Other ^r Canals ² .	Total, Hyderabad Canals.
29	30	31	32	33	34	35	36	37	38	39
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
... 17	553	231	...	43	106	...	3	...	1	15
17	554	231	...	43	106	...	3	...	64	1,843
5,555 476	7,438 1,126	1,532 40	701 11	2,482 80	2,711 141	1,040 9	887 ...	563 35	8,405 1,105	67,869 14,161
6,031	8,564	1,572	712	2,562	2,852	1,049	887	598	9,510	82,030
2,593 126	5,110 579	9,542 248	5,392 62	23,833 816	31,709 1,413	21,997	20,089 48	14,813 452	8,370 693	1,53,667 5,510
2,719	5,689	9,790	5,454	24,649	33,122	22,045	20,097	15,265	9,063	1,59,177
38 2	94 10	1,530 15	952 10	10,226 296	13,933 446	7,032 10	4,867 45	3,438 98	230 21	42,975 1,100
40	104	1,545	962	10,522	14,379	7,042	4,912	3,536	251	44,075
571 112	5,629 3,381	2,479 45	833 8	3,438 203	3,208 139	2,314 5	1,563 2	1,684 58	1,741 385	31,761 10,325
683	9,010	2,524	841	3,641	3,347	2,319	1,565	1,742	2,126	32,086
8,757 733	13,272 5,649	15,063 579	7,878 91	39,979 1,438	51,561 2,245	32,383 72	27,406 58	20,498 643	18,747 2,268	2,96,287 32,939
9,490	23,921	13,662	7,969	41,417	53,806	32,455	27,464	21,141	21,015	3,29,226
760 314	441 947	191 129	8 ...	34 2	157 372	77 255	10 231	11 420	2,308 1,269	8,618 7,546
1,074	1,388	320	8	36	529	332	241	431	3,577	16,164
15 1	23 77	4 2	8 ...	...	...	...	...	4	43 27	183 172
16	100	6	8	...	...	...	...	4	70	355
... 159	288 426	238 691	1 6	224 202	110 606	72 511	37 478	69 481	407 1,111	2,072 5,039
159	714	929	7	426	716	583	515	550	1,513	7,111
...	22 467 489	11 49 60	6 58 64	32 336 368	214 2,201 2,415	64 325 389	281 758 1,039	91 372 463	72 310 382	1,058 5,328 6,396
775 474	774 1,917	444 871	23 64	290 540	481 3,179	213 1,091	328 1,467	171 1,277	2,830 2,717	11,931 18,065
1,249	2,691	1,315	87	880	3,660	1,304	1,795	1,448	5,547	30,016
9,532 1,207	19,046 7,566	15,527 1,450	7,901 155	40,269 1,978	52,042 5,424	32,596 1,163	27,734 1,525	23,669 1,920	21,577 4,985	3,08,218 51,024
10,739	26,612	16,977	8,056	42,247	57,466	33,759	29,259	22,589	26,562	3,59,242

1	FULELI CANALS.				KARACHI			
	Fuleli Canal.	Other Canals.	Total Fuleli Canals.	Canals north of Kotri.	Kalri.	Baghar.	Uchita.	Canals in Tatta.
	40	41	42	43	44	45	46	47
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Rice ... { Lift ...	14	...	14	...	...	3	20	1
... { Flow ...	1,36,274	8,737	1,45,011	560	5,766	10,130	10,248	8,583
Total ...	136,288	8,737	1,45,025	560	5,766	10,133	10,268	8,584
Judri ... { Lift ...	1,924	319	2,243	1,917	520	9	...	60
... { Flow ...	1,360	56	1,416	211	3	1	...	...
Total ...	3,284	375	3,659	2,128	523	10	...	60
Bajri ... { Lift ...	64,782	5,317	70,099	1,979	3,137	5,829	83	563
... { Flow ...	8,700	291	8,991	21	21	311	...	38
Total ...	73,482	5,608	79,090	2,000	3,158	6,140	83	601
Cotton ... { Lift ...	11,454	372	11,826	219	1	...	...	...
... { Flow ...	1,823	292	2,025	38	...	...	...	...
Total ...	13,277	574	13,851	257	1	...	...	...
Other crops ... { Lift ...	8,290	682	8,972	99	642	1,793	279	165
... { Flow ...	1,823	353	2,176	41	416	199	206	125
Total ...	10,113	1,035	11,148	140	1,058	1,992	485	230
Total, Kharif ... { Lift ...	86,464	6,690	93,154	4,214	4,300	7,634	382	729
... { Flow ...	1,49,990	9,639	1,59,619	871	6,206	10,641	10,454	8,749
Total ...	2,36,444	16,329	2,52,773	5,085	10,506	18,275	10,836	9,475
Wheat ... { Lift ...	324	79	403	46	...	...	...	...
... { Flow ...	8,171	782	8,953	856	8	158	...	248
Total ...	8,495	861	9,356	902	8	158	...	248
Barley ... { Lift ...	36	6	42	1	...	80	10	...
... { Flow ...	2,384	140	2,524	2	219	2,360	85	400
Total ...	2,420	146	2,566	3	219	2,440	95	400
Oil-seeds ... { Lift ...	785	24	809	...	...	...	...	...
... { Flow ...	17,803	994	18,797	816	335	659	53	454
Total ...	18,588	1,018	19,606	816	335	659	53	454
Other crops ... { Lift ...	888	3	891	64	207	114	83	48
... { Flow ...	16,699	192	16,891	423	497	2,061	949	407
Total ...	11,587	195	11,782	487	704	2,175	1,032	455
Total, Rabi ... { Lift ...	2,033	112	2,145	111	207	194	93	48
... { Flow ...	39,057	2,108	41,165	2,097	1,059	5,238	1,087	1,509
Total ...	41,090	2,220	43,310	2,208	1,266	5,432	1,180	1,557
Total, Kharif and Rabi ... { Lift ...	88,497	6,802	95,299	4,325	4,507	7,828	475	777
... { Flow ...	1,89,057	11,747	2,00,784	2,968	7,265	15,879	11,541	10,255
Total ...	2,77,554	18,549	2,96,083	7,293	11,772	23,707	12,016	11,032

CANALS.

Shal Canals.	Phyari.	Canals in Mirpur Batoro.	Canals in Sujawal.	Satta.	Canals in Jatti.	Khanta.	Kokowari.	Canals in Shabbandar.	Total Karakchi Canals.
48	49	50	51	52	53	54	55	56	57
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
... 2,435	... 61,555 ⁷	... 10,160	... 6,157	... 5,800	... 1,622	... 5,117	... 12,627 ³	... 1,683	... 1,42,443 ³⁴
2,435	61,562	10,160	6,157	5,800	1,622	5,117	12,630	1,683	1,42,477
5	28 ³	66 ⁵	...	6 ⁹	...	...	...	...	2,611 ²³²
5	31	71	...	15	...	...	...	...	2,843
30	2,485 ¹⁸⁹	2,900 ¹⁸²	631 ⁴	2,805 ⁵	234	48	21	178	20,923 ⁷⁵¹
30	2,654	3,082	635	2,810	234	48	21	178	21,674
15	7	7 ¹	...	...	...	...	...	...	249 ³⁹
15	7	8	...	...	...	...	...	...	288
1	1,223 ⁴²³	360 ⁸²	37 ¹	257 ⁵⁶⁶	34 ²	30 ¹¹⁴	64 ⁴⁵	4 ³⁹	4,928 ^{2,259}
1	1,646	442	38	823	36	144	109	43	7,187
51 2,435	3,750 ^{62,150}	3,333 ^{10,430}	668 ^{6,162}	3,068 ^{6,380}	268 ^{1,624}	78 ^{5,231}	88 ^{12,672}	182 ^{1,722}	28,745 ^{1,45,724}
2,486	65,900	13,763	6,830	9,448	1,892	5,309	12,760	1,904	1,74,469
...	...	...	...	...	...	...	...	...	48
307	30	16	1	...	...	...	...	...	1,624
307	32	16	1	...	...	...	...	...	1,672
...	...	...	...	...	...	...	...	...	123
2	32 ⁴³³	94	159	245	302	59	62	1	4,423
2	465	94	159	245	302	59	62	1	4,546
...	...	...	...	...	...	...	...	...	17
190	1,131	1,636	275	116	237	35	111	39	6,107
190	1,148	1,636	275	116	237	35	111	39	6,124
83 75	77 ⁸²⁶	659	1 ⁵⁵	157 ³⁴⁰	13	12	494	83	834 ^{6,894}
158	903	659	56	497	13	12	494	83	7,728
...	...	...	...	...	...	...	...	...	1,022
83 574	128 ^{2,420}	2,405	1 ⁴⁹⁰	157 ⁷⁰¹	572	106	667	123	19,048
657	2,548	2,405	491	858	572	106	667	123	20,070
...	...	...	...	...	...	...	...	...	20,767
134 5,000	3,873 ^{64,370}	3,333 ^{12,835}	669 ^{6,652}	3,225 ^{7,081}	268 ^{2,196}	78 ^{5,337}	88 ^{13,339}	182 ^{1,845}	1,64,772
3,143	68,448	16,168	7,321	10,306	2,464	5,415	13,427	2,027	1,94,539

ABSTRACT.

		Begari Canals.	Shikarpur Canals.	Ghar Canals.	Western Nara.	Eastern Nara.	Hyderabad Canals.	Fulali Canals.	Kanichi Canals.	Grand Total.
		Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.
Rice ...	{ Lift ...	...	18	8	42	...	15	14	34	131
	{ Flow ...	5,163	33,646	1,59,397	72,371	80,065	1,843	1,45,011	1,42,443	6,39,939
	Total ...	5,163	33,664	1,59,405	72,413	80,065	1,858	1,45,025	1,42,477	6,40,070
Juarí ...	{ Lift ...	25,653	18,711	8,372	26,383	840	67,869	2,243	2,611	1,53,182
	{ Flow ...	1,08,145	31,902	52,342	39,045	290	14,161	1,416	232	2,48,033
	Total ...	1,33,798	50,613	61,114	66,028	1,130	82,030	3,659	2,843	4,01,215
Bájrí ...	{ Lift ...	4,575	1,139	1,168	2,811	20,895	1,53,667	70,099	20,923	2,75,277
	{ Flow ...	21,957	1,985	4,846	1,981	18,601	5,510	8,991	751	64,622
	Total ...	26,532	3,124	6,014	4,792	39,496	1,59,177	79,090	21,674	3,39,899
Cotton...	{ Lift ...	4	203	83	226	15,580	42,975	11,826	249	71,096
	{ Flow ...	676	836	366	187	10,143	1,100	2,025	39	15,372
	Total ...	680	1,039	449	413	25,673	44,075	13,851	288	86,468
Other crops ...	{ Lift ...	1,569	944	1,733	322	3,927	31,761	8,972	4,928	54,156
	{ Flow ...	31,677	4,041	9,392	2,363	4,909	10,325	2,176	2,259	67,142
	Total ...	33,246	4,985	11,125	2,685	8,836	42,086	11,148	7,187	121,298
Total, Kharif...	{ Lift ...	31,801	21,015	11,864	29,784	41,192	2,96,287	93,154	28,745	5,53,842
	{ Flow ...	1,87,618	72,410	2,26,243	1,16,547	1,14,008	32,939	159,619	1,45,724	10,35,108
	Total ...	1,99,419	93,425	2,38,107	1,46,331	1,55,200	3,29,226	2,52,773	1,74,469	15,88,950
Wheat ...	{ Lift ...	31	478	3,025	18,379	8,359	8,618	48	48	39,341
	{ Flow ...	10,814	21,586	48,219	19,771	24,722	7,546	8,953	1,624	1,43,235
	Total ...	10,845	22,064	51,244	38,150	33,081	16,164	9,356	1,672	1,82,576
Barley ...	{ Lift ...	40	35	26	1,529	186	183	42	123	2,164
	{ Flow ...	327	109	1,086	1,310	198	172	2,624	4,423	10,149
	Total ...	367	144	1,112	2,839	384	355	2,566	4,546	12,313
Oil-seeds ...	{ Lift ...	133	102	424	1,712	1,488	2,072	809	17	6,757
	{ Flow ...	7,638	2,958	22,652	10,290	20,957	5,039	18,797	6,107	93,838
	Total ...	7,771	3,060	22,476	12,002	22,445	7,111	19,606	6,124	1,00,595
Other crops ...	{ Lift ...	60	221	119	1,620	192	1,058	891	834	4,905
	{ Flow ...	6,695	2,427	5,292	5,375	12,070	5,328	10,891	6,894	54,970
	Total ...	6,755	2,648	5,411	6,995	12,262	6,386	11,782	7,728	59,965
Total, Rabi ...	{ Lift ...	264	836	3,594	23,240	10,225	11,931	2,145	1,022	53,257
	{ Flow ...	25,472	27,980	76,049	36,746	57,947	18,085	41,165	19,048	3,02,192
	Total ...	25,736	27,916	80,243	59,986	68,172	30,016	43,310	20,070	3,55,449
Total, Kharif and Rabi.	{ Lift ...	32,065	21,851	15,458	53,024	51,417	3,08,218	95,299	29,767	6,07,099
	{ Flow ...	1,93,090	99,490	3,02,892	1,53,293	1,71,955	51,034	2,00,784	1,64,772	13,37,300
	Total ...	2,25,155	1,21,341	3,18,350	2,06,317	2,23,372	3,59,242	2,96,683	1,94,539	19,44,399

ANNUAL IRRIGATION REVENUE REPORT,

SIND,

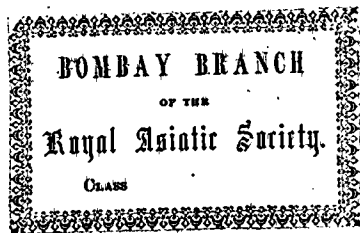
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ANNUAL IRRIGATION REVENUE REPORT,

SIND,

1891-92.

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ANNUAL REVENUE REPORT

OF THE

PUBLIC WORKS DEPARTMENT IRRIGATION IN SIND FOR THE YEAR 1891-92.

1. There is a marked difference in the relation of the curve of the inundation of 1891 to that of the 10 preceding years at Bakhar and at Kotri. At the former place the water-level during July was much below the mean, with which it closely corresponded throughout August; while at the latter the curves agreed fairly well in July but separated in August, the mean being considerably the lower. As a consequence of this the inundation operated differently in Upper and in Lower Sind; on the whole it was a poor one—low, short and fluctuating, but more favourable for the Southern than for the Northern districts, in which it was worse than the previous years. The rise commenced early and was well maintained till towards the end of June, when the first serious fall took place and was followed by others; so that it was almost the 1st of August before a steady average supply was available for the canals, and this only lasted for 30 days at Bakhar, and for 35 at Kotri.

The maximum reading at Bakhar was only 14' 9" or 1' 3" less than that of 1890; while the Kotri gauge reached 20' 7", which was also the highest reading of the previous year.

The rainfall, not being of much account, was this year insignificant and less than usual, and the falling no floods the province depended solely on the inundation and on the facilities of the canals to distribute it for its harvest.

2. There were no floods north of Kotri, with the single exception of a small local spill which left and returned to the river in the Rohri District; the Bahawalpur floods did not appear although anxiously waited for, in hope or fear, by the cultivators who for 2 years had profited or lost by it. In all Northern Sind the inundation was low and short, the river embankments were not severely tried, there were no breaches and only a few leaks, which were easily closed. South of Kotri, where for a considerable length the Indus is embanked on both sides, the water-level was higher than usual and there were several breaches, but they were not so numerous as in the previous year, and the damage done by the floods from them was much less.

3. An inundation of the character described above is peculiarly trying to high-level canals. The early rise filled most of them before water was required, and each subsequent fall left a deposit, varying in depth according to the condition of the canal; thus reducing its future carrying capacity. Notwithstanding this, the complaints for want or deficiency of water were very few, and the canals one and all did their work wonderfully well in exceptionally trying circumstances. There is unfortunately one marked and important exception. The Desert Canal approached complete failure owing to the rapid destruction of the mouth of the Dhánd by which it was fed. This was brought about by the sudden set of the river on to a sand-bank which it eroded and carried down, depositing the sand in the mouths of the Dhánd and of the canal. Swarms of locusts completed the destruction of the crops on this canal, which was practically deserted towards the end of the season. The Pritchard Canal also suffered from erosion at its mouth, but the consequences were partially discounted by the unusually good supply in the Western Nára which worked exceptionally well.

4. The clearance grant was expended as usual, but more particular attention was given to improving the mouths and opening out the tails of the more important canals in the Hyderabad and Fuleli Districts. In the Ghár Canals district heavy clearance to levelled beds was carried out in the Ghár and all its branches with a marked improvement in the supply. In the Karáchi Canals

the expenditure on repairing and strengthening the river embankments was heavier than usual, owing to the excessive damage done to them by the previous inundation; its effect was evident in a considerable reduction in the number of breaches and consequent damage by floods.

5. The following statement gives the assessed area of cultivation on Government land for the year and five preceding years :—

STATEMENT A (*vide* TABLE VII).

			MAJOR.		MINOR.				Grand Total.
			Capital.		Capital.	Revenue.	Agricultural.	Total.	
			Acres.		Acres.	Acres.	Acres.	Acres.	
1886-87	...	...	{ Kharif ...	292,719	473,144	640,378	1,337	1,115,059	1,407,778
			{ Rabi ...	39,426	55,689	105,854	4,019	146,462	185,888
			Total ...	332,145	509,733	746,432	5,356	1,261,521	1,593,666
1887-88	...	...	{ Kharif ...	323,232	469,157	644,632	1,195	1,114,984	1,438,216
			{ Rabi ...	50,663	67,237	104,753	2,758	164,748	213,411
			Total ...	373,895	526,394	749,385	3,953	1,279,732	1,653,627
1888-89	...	...	{ Kharif ...	411,939	627,525	707,779	1,343	1,236,647	1,648,586
			{ Rabi ...	77,372	74,445	104,816	2,337	161,598	238,970
			Total ...	489,311	601,970	812,595	3,680	1,398,245	1,887,556
1889-90	...	...	{ Kharif ...	418,047	555,750	640,378	2,597	1,303,993	1,722,040
			{ Rabi ...	121,756	118,178	104,753	2,766	266,608	387,764
			Total ...	539,803	673,928	745,131	5,363	1,570,601	2,109,804
1890-91	...	...	{ Kharif ...	353,289	556,792	640,378	1,330	1,243,650	1,596,939
			{ Rabi ...	90,679	124,994	139,416	3,229	267,539	358,218
			Total ...	443,968	681,786	779,794	4,559	1,511,189	1,955,157
Average	...	...	{ Kharif ...	359,845	516,474	684,386	1,560	1,202,867	1,562,712
			{ Rabi ...	75,979	82,288	115,961	2,222	201,271	277,250
			Total ...	435,824	598,762	800,794	3,782	1,404,138	1,839,962
1891-92	...	...	{ Kharif ...	291,102	544,178	677,437	1,195	1,222,491	1,513,533
			{ Rabi ...	111,339	136,751	185,193	2,901	324,845	436,184
			Total ...	402,441	680,929	862,630	3,717	1,547,276	1,949,717
Increase or Decrease	...	...	{ Kharif ...	-68,743	+27,704	-7,396	-744	+19,564	-49,179
			{ Rabi ...	+35,360	+54,463	+69,232	-121	+123,574	+158,934
			Total ...	-33,383	+82,167	+61,836	-865	+143,138	+109,755

The area of assessed cultivation, though less than that of the previous year by 5,410 acres, exceeds the average by 109,755 acres. Separating the kharif and rabi cultivation, there is a decrease in the former of 83,406 acres and of 49,179, and an increase in the latter of 77,966 and 158,934 acres compared with the figures of 1890-91 and of the average. The increase in rabi cultivation is remarkable, considering that the whole crop was grown on canal water, and it is due to the lowness of the river in June, the late rise and the high price of wheat. The same causes operated to reduce the kharif area, to which result the failure of the Desert Canal also contributed. The area irrigated by Major works was less than the average by 33,383 acres, and than that of the previous year by Rs. 41,527. This falling off is all in the kharif crop, which failed on the Desert Canal; the rabi area is the largest of the series excepting the year 1889-90. Under Minor works those for which capital accounts are kept show fair results, giving an increase for 82,167 acres over the average, and only 857 decrease from the figures of the previous year. Here the area of kharif has been fairly maintained, while the rabi is the largest recorded in the six years. The peculiar features of the inundation are more marked in the returns from the large number of smaller canals, for which only revenue accounts are kept, by the decrease in kharif and large increase in rabi cultivation. The net gain above the average under this head is 61,836 acres after deducting a decrease of 7,396 acres of kharif. The cultivation credited to "Agricultural Works",

under which head most of the river embankments are accounted for, is small and unimportant, and shows a decrease of 865 acres below the average, which is only 5,482 acres. Major works are wholly responsible for the decrease of cultivation in the province in 1891-92, and of these the Desert Canal is chief defaulter. If this canal had yielded only an average return, the area of assessed cultivation in Sind would have been the largest ever recorded notwithstanding a poor inundation and almost complete absence of floods and rain. The total assessed cultivation for the year under Minor heads shows an increase of 142,774 acres over the average, and of 35,723 acres above the area of 1890-91. The kharif crop is 19,564 acres over the average, but 21,219 less than that of previous year; the total increase is due to rabi, which is 123,574 acres in excess of the average and 56,942 above that of 1890-91.

These figures are encouraging and remarkable, and bring into prominent relief the unfortunate failure of the Desert Canal, which alone prevented equally satisfactory returns being presented by Major works.

6. The following statement exhibits the area irrigated in Jágghir lands in British territory :—

STATEMENT A—1 (*vide* TABLE III A).

			Major.		Minor.				Grand Total.
			Capital.		Capital.	Revenue.	Agricultural.	Total.	
			Acres.		Acres.	Acres.	Acres.	Acres.	
1886-87	...	...	{ Kharif ... Rabi ...	7,616 2,184	67,859 57,016	28,258 10,778	27 20	96,144 47,814	103,760 49,998
			Total ...	9,800	104,875	39,036	47	143,968	153,758
1887-88	...	...	{ Kharif ... Rabi ...	7,621 970	68,757 4,674	61,440 10,126	33 13	130,230 14,813	137,551 15,783
			Total ...	8,591	73,431	71,566	46	145,043	153,634
1888-89	...	...	{ Kharif ... Rabi ...	8,564 1,574	69,565 4,664	61,574 8,804	...	131,139 13,506	139,703 15,080
			Total ...	10,138	74,229	70,378	38	144,645	154,783
1889-90	...	...	{ Kharif ... Rabi ...	8,120 2,244	72,563 5,077	66,654 5,413	...	139,217 10,490	147,337 12,734
			Total ...	10,364	77,640	72,067	...	149,707	160,071
1890-91	...	...	{ Kharif ... Rabi ...	8,787 3,455	72,079 18,998	62,509 20,744	...	134,588 39,742	141,375 43,197
			Total ...	10,242	91,077	83,253	...	174,330	184,572
	Average	...	{ Kharif ... Rabi ...	7,742 2,086	70,164 14,086	56,087 11,173	12 14	126,263 25,278	134,005 27,858
			Total ...	9,827	84,250	67,260	26	151,536	161,363
1891-92	...	...	{ Kharif ... Rabi ...	6,775 6,145	69,853 8,289	60,769 13,361	...	130,622 21,650	137,397 27,795
			Total ...	12,920	78,142	74,180	...	152,272	165,192
	Increase or Decrease	...	{ Kharif ... Rabi ...	-967 +4,060	-311 -5,797	+4,682 +2,188	-12 -14	+4,359 -3,623	+3,392 +497
			Total ...	+3,093	-6,108	+6,870	-26	+736	+3,329

The whole area cultivated in Jágghir lands amounted to 165,192 acres, of which 137,397 were kharif and 27,795 rabi. This represents a gross increase, over the average of 3,829 acres, of which 3,392 were in the kharif crop and 437 in rabi. Compared with that of the previous year the result is not so good, showing a total decrease of 19,380 acres, or 3,978 in kharif and 15,402 in rabi. Under Major works the figures are satisfactory, but under Minor, although there is a net increase of 736 acres over the average, those for which capital accounts are kept show a falling off of 6,108 acres.

7. In the following statement is shown the cultivation in Foreign Territory irrigated by Government Canals :—

STATEMENT A—2 (*vide* TABLE III A).—

					Major.		Minor.			Grand Total.
					Capital.	Capital.	Revenue.	Agricultural.	Total.	
					Acres.					Acres.
1886-87	...	...	{ Kharif ...	...	65,076	...	...	...	...	65,076
			{ Rabi ...	...	2,150	...	...	...	...	2,150
			Total	...	67,226	...	...	...	...	67,226
1887-88	...	...	{ Kharif ...	...	60,998	...	...	...	...	60,998
			{ Rabi ...	...	2,855	...	...	...	...	2,855
			Total	...	63,853	...	...	...	...	63,853
1888-89	...	...	{ Kharif ...	...	66,141	...	...	...	...	66,141
			{ Rabi ...	...	10,155	...	...	...	...	10,155
			Total	...	76,296	...	...	...	...	76,296
1889-90	...	...	{ Kharif ...	...	67,253	...	...	...	...	67,253
			{ Rabi ...	...	12,691	...	...	...	...	12,691
			Total	...	79,944	...	...	...	...	79,944
1890-91	...	...	{ Kharif ...	...	61,966	...	...	...	...	61,966
			{ Rabi ...	...	1,778	...	...	...	...	1,778
			Total	...	63,744	...	...	...	...	63,744
Average	...	...	{ Kharif ...	...	64,287	...	...	...	...	64,287
			{ Rabi ...	...	5,926	...	...	...	...	5,926
			Total	...	70,213	...	...	...	...	70,213
1891-92	...	...	{ Kharif ...	...	39,891	...	...	...	...	39,891
			{ Rabi ...	...	10,831	...	...	...	...	10,831
			Total	...	50,722	...	...	...	...	50,722
Increase or Decrease	...	...	{ Kharif ...	...	-24,396	...	...	...	...	-24,396
			{ Rabi ...	...	+ 4,905	...	...	...	...	+ 4,905
			Total	...	-19,491	...	...	...	...	-19,491

These figures show the cultivation in Khelát from water supplied by the Desert and Begári Canals—both Major works. They are unsatisfactory, giving a net decrease of 19,491 acres. The rabi area was above the average, owing to the good supply given by the Begári, but the failure of the Desert Canal reduced the kharif cultivation by more than one-third.

8. The figures of the three preceding statements are collected in the following, which shows the whole assessed cultivation in Government Jaghir and foreign lands:—

STATEMENT A—3 (*vide* TABLES III A. AND VII).—

					MAJOR.		MINOR.			Grand Total
					Capital.	Capital.	Revenue.	Agricultural.	Total.	
					Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1886-87	...	...	{ Kharif ..	...	365,411	541,003	668,836	1,364	1,211,208	1,576,614
			{ Rabi ...	...	43,760	73,605	116,652	4,039	194,276	238,035
			Total	...	409,171	614,608	785,468	5,403	1,405,479	1,814,650
1887-88	...	...	{ Kharif ..	...	391,851	537,914	706,072	1,228	1,245,214	1,637,065
			{ Rabi ...	...	51,488	61,911	114,879	2,771	179,561	234,049
			Total	...	446,339	599,825	820,951	3,999	1,424,775	1,871,114
1888-89	...	...	{ Kharif ..	...	486,644	597,090	769,353	1,343	1,367,786	1,854,430
			{ Rabi ...	...	89,101	79,109	93,620	2,375	176,104	264,205
			Total	...	575,745	676,199	862,973	3,718	1,542,890	2,118,635
1889-90	...	...	{ Kharif ..	...	493,420	628,313	812,300	2,597	1,443,210	1,936,530
			{ Rabi ...	...	106,691	123,255	150,477	2,766	2,76,498	413,159
			Total	...	600,111	751,568	962,777	5,363	1,719,708	2,349,689

					Major.		Minor.			Grand Total.
					Capital.	Capital.	Revenue.	Agricultural.	Total.	
					Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1890-91	...	...	{	Kharif	422,042	628,871	748,037	1,330	1,378,238	1,800,280
				Rabi	95,912	143,992	160,060	3,229	307,281	403,193
				Total	517,954	772,863	908,097	4,559	1,685,519	2,203,473
Average	...	...	{	Kharif	431,874	586,639	740,919	1,573	1,329,130	1,761,004
				Rabi	83,900	96,374	127,134	3,036	226,544	310,534
				Total	515,864	683,013	868,053	4,608	1,555,674	2,071,538
1891-92	...	...	{	Kharif	337,768	614,031	738,206	816	1,353,053	1,690,821
				Rabi	128,315	145,040	198,554	2,901	346,495	474,810
				Total	466,083	759,071	936,760	3,717	1,699,548	2,165,631
Increase or Decrease	...	{	{	Kharif	-94,106	+27,392	-2,713	-756	+23,923	-70,183
				Rabi	+44,325	+48,666	+71,420	-135	+119,951	+164,276
				Total	-49,781	+76,058	+68,707	-891	+143,874	+94,093

The area cultivated in 1891-92 amounted to 2,165,631 acres made up of 1,690,821 acres of kharif and 474,811 of rabi. The figures have been explained in detail in preceding paras., but a few points are worthy of notice. The rabi crop is the largest recorded in the statement, exceeding the average by 164,276 acres; the kharif is the smallest since 1887-88, falling short of the average by 70,183 acres. Under Minor works the cultivation is the largest on record, with the single exception of that of 1889-90, which exceeds it by only 20,160 acres. The bad returns from the Desert Canal bring the cultivation on Major works down to 466,083 acres or 49,781 below the average. Had all these canals worked only fairly well and given an average kharif crop of 431,874 acres, the total area of cultivation in the province would have amounted to 2,259,737 acres or the largest yet recorded.

9. The following statement gives the same information as the preceding one, but the figures are given for each district:—

STATEMENT A—4 (vide TABLES III A AND VII.)

Districts.			Major.					Minor.					Grand Total.	Total, 1890-91.	Average, five years.	Compared with 1890-91.	Compared with average.
			Capital.					Reven.									
			Capital.	Capital.	Revenue.	Agricultural.	Total.	Capital.	Capital.	Revenue.	Agricultural.	Total.					
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begari Canals	{	Kharif	120,053	...	...	816	...	...	193,599	266,445	287,151	72,546	...	...	...	...	...
		Rabi	61,049	...	...	3,901	...	2,901	61,950	27,776	25,581	36,174	...	...	...	...	...
		Total	254,132	...	...	3,717	...	3,717	257,549	294,221	312,732	...	...	...	...	...	...
Shikarpur Canals	{	Kharif	...	...	90,058	...	90,058	...	90,038	101,456	109,635	...	...	...	...	...	...
		Rabi	...	...	55,451	...	55,451	...	50,451	31,833	27,378	...	...	...	...	...	...
		Total	...	...	145,509	...	145,509	...	145,500	133,280	137,016	...	...	...	...	...	...
Ghar Canals...	{	Kharif	...	235,468	...	...	235,468	...	235,468	246,774	235,780	...	...	...	...	...	...
		Rabi	...	93,244	...	...	93,244	...	93,244	93,539	52,648	...	...	...	...	...	...
		Total	...	328,712	...	...	328,712	...	328,712	340,313	298,628	...	...	...	...	...	...
Western Nara	{	Kharif	...	...	174,323	...	174,323	...	174,323	164,569	178,177	...	...	...	...	...	...
		Rabi	...	...	86,345	...	86,345	...	86,345	75,058	63,004	...	...	...	...	...	...
		Total	...	...	260,668	...	260,668	...	260,668	239,604	231,781	...	...	...	...	...	...
Eastern Nara	{	Kharif	144,685	...	...	...	144,685	...	144,685	156,927	146,254	...	...	...	...	...	...
		Rabi	67,268	...	...	...	67,268	...	67,268	71,365	61,400	...	...	...	...	...	...
		Total	211,951	...	...	...	211,951	...	211,951	228,292	207,663	...	...	...	...	...	...
Hyderabad Canals	{	Kharif	...	101,435	277,368	...	...	...	378,801	378,781	352,012	...	...	...	...	...	...
		Rabi	...	8,589	30,534	...	...	...	34,869	32,183	31,587	...	...	...	...	...	...
		Total	...	105,424	308,186	...	...	...	413,610	410,964	383,590	...	...	...	...	...	...
Fulehi Canals	{	Kharif	...	277,128	19,371	...	...	...	296,499	303,552	278,568	...	...	...	...	...	...
		Rabi	...	47,807	1,466	...	...	...	49,273	46,527	37,113	...	...	...	...	...	...
		Total	...	324,935	20,837	...	...	...	345,772	350,079	315,681	...	...	...	...	...	...
Karachi Canals	{	Kharif	...	...	177,083	...	177,083	...	177,083	181,776	175,424	...	...	...	...	...	...
		Rabi	...	...	21,472	...	21,472	...	21,472	21,935	15,704	...	...	...	...	...	...
		Total	...	...	198,560	...	198,560	...	198,560	203,711	194,128	...	...	...	...	...	...
Total	{	Kharif	337,768	614,031	738,206	816	1,555,053	1,690,821	1,690,821	1,900,280	1,761,004	...	...	...	...	...	...
		Rabi	128,315	145,040	198,554	2,901	346,495	474,810	474,810	403,193	310,534	...	...	...	...	...	...
		Total	466,083	759,071	936,760	3,717	1,699,548	2,165,631	2,165,631	2,203,473	2,071,538	...	...	...	...	...	...

These figures require no further explanation. It is only necessary to remark that the returns from the Begari Canals are bad, those from the Shikarpur, Western Nara and Hyderabad Districts are very good, while the others shew fair results.

10. In this and preceding statements the area of dubari (twice cropped) cultivation is not included. In the year under report it amounted to 219,768

acres for four of the five revenue districts in Sind, the figures for Hyderabad have not been received, but in this district the area is probably very small.

The following is the detail for each district :—

District.	YEAR.		Increase or Decrease.
	1890-91.	1891-92.	
	2	3	4
	Acres.	Acres.	Acres.
Upper Sind Frontier...	6,936	25,183	+ 18,247
Shikarpur ...	150,424	165,795	+ 15,371
Thar and Parkar ...	2,521	5,251	+ 2,730
Hyderabad ...	Not received		
Karachi ...	27,924	23,539	— 4,385
Total ...	187,805	219,768	+ 31,963

Dubari crops are for the most part grown after rice on moisture left in the land, they are greatly assisted and encouraged by a late watering and are assessed at 4 annas per acre. The receipts are included in the net consolidated revenue. The increase in the three districts is due to the good height of the river late in the season, which enabled a large area to be saturated, and to the lowness of the river at the commencement of the inundation, on account of which more land was left available for late crops. In Karachi the want of rain helped to reduce the crop, which depends entirely on the moisture left after the river has fallen. If the area of dubari be added to that of cultivation, as given in the statements, the total for the province amounts to 2,385,399 acres.

11. The five preceding statements and the remarks on them deal only with the cultivation, in the following, which are similar in number and form, the net consolidated assessment of the province is shown and considered.

Statement B gives the net consolidated assessment on Government land :—

STATEMENT B (*vide* TABLE VII.)

		MAJOR.	MINOR.				Grand Total.	
		Capital.	Capital.	Revenue.	Agricultural.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
1886-87	{ Kharif	...	6,12,163	12,60,029	16,37,522	2,710	29,00,261	35,12,424
	{ Rabi	...	73,204	98,104	2,96,419	8,178	4,02,701	4,75,905
	Total	...	6,85,367	13,58,133	19,33,941	10,888	33,02,962	39,88,329
1887-88	{ Kharif	...	6,76,085	12,51,305	16,65,938	2,412	29,19,655	35,95,740
	{ Rabi	...	89,990	1,44,698	2,97,710	5,513	4,47,921	5,37,911
	Total	...	7,66,075	13,96,003	19,63,648	7,925	33,67,576	41,33,651
1888-89	{ Kharif	...	8,66,829	14,07,512	18,40,579	2,746	32,50,837	41,17,666
	{ Rabi	...	1,36,217	1,98,114	2,38,489	4,730	4,41,333	5,77,550
	Total	...	10,03,046	16,05,626	20,79,068	7,476	36,92,170	46,95,216
1889-90	{ Kharif	...	8,71,271	14,44,821	18,39,234	5,240	32,89,295	41,40,566
	{ Rabi	...	2,04,259	3,24,636	3,97,970	5,820	7,28,426	9,32,685
	Total	...	10,75,530	17,69,457	22,37,204	11,060	40,17,721	50,73,251
1890-91	{ Kharif	...	7,69,518	15,18,111	18,22,379	2,651	33,43,141	41,12,659
	{ Rabi	...	1,77,137	3,42,806	3,91,763	6,546	7,41,115	9,18,252
	Total	...	9,46,655	18,60,917	22,14,142	9,197	40,84,256	50,30,911
Average	{ Kharif	...	7,59,173	13,76,356	17,61,130	3,152	31,40,638	38,99,811
	{ Rabi	...	1,56,162	2,21,672	3,24,470	6,157	5,52,299	6,88,461
	Total	...	8,95,335	15,98,028	20,85,600	9,309	36,92,937	45,88,272
1891-92	{ Kharif	...	5,71,641	14,77,309	17,95,416	1,480	32,74,205	38,45,846
	{ Rabi	...	2,32,132	3,76,529	5,42,900	5,301	9,24,730	11,56,862
	Total	...	8,03,773	18,53,838	23,38,316	6,781	41,98,935	50,02,708
Increase or Decrease	{ Kharif	...	-1,87,532	+1,00,953	+34,286	-1,672	+1,33,567	-53,965
	{ Rabi	...	+95,970	+1,54,887	+2,18,430	-856	+3,72,431	+4,68,401
	Total	...	-91,562	+2,55,810	+2,52,716	-2,528	+5,05,998	+4,14,436

The total assessment for the year amounts to Rs. 50,02,708, being less than that of the previous year by Rs. 28,203, but exceeding the average by Rs. 4,14,436. Separating the figures for kharif and rabi, the assessment on the former shows a decrease of Rs. 53,965 below the average and of Rs. 2,66,813 below that of 1890-91; while in the latter the year's assessment exceeds the average by Rs. 4,68,401 and that of 1890-91 by Rs. 2,38,610. The assessment does not vary directly with the cultivation, and it is a very satisfactory feature in the returns for the year under report that the figures of assessment compare more favourably with those of previous year than do those of cultivation. It is satisfactory for this reason, that it suggests a general improvement in the character of the cultivation and the growth of more valuable crops, which, under the settlement now almost universally in force in Sind, pay higher rates. It is evident from the statement that this happy result, due to gradual improvement of canals and increased security from floods, is general, but more striking in the returns from "Minor Works," under which head of late years numerous small defects in canals have been rectified and the clearance generally more thoroughly and scientifically carried out. These remarks apply equally to Major works, but unfortunately, owing to the disastrous failure of one important canal (the Desert), they are not borne out by this year's returns. The explanations given under the cultivation statements apply here, and it is unnecessary to go further than to note the extremely satisfactory returns from canals under "Minor Works," Capital and Revenue.

12. The following statement gives the assessed revenue from Jāghirs:—

STATEMENT B—1 (*vide* TABLE III A).

		Major.		Minor.				Grand Total.
		Capital.		Capital.	Revenue.	Agricultural.	Total.	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1886-87	{ Kharif ...	3,634	23,875	24,541	15	47,981	51,565	
	{ Rabi ...	867	1,035	3,082	7	4,124	4,981	
	Total ...	4,491	24,610	27,423	22	52,055	56,546	
1887-88	{ Kharif ...	3,624	22,468	22,603	16	45,087	48,711	
	{ Rabi ...	811	1,569	3,793	7	5,169	5,480	
	Total ...	3,935	23,837	26,396	23	50,256	54,191	
1888-89	{ Kharif ...	4,063	29,781	22,808	...	52,589	56,652	
	{ Rabi ...	602	1,237	2,557	11	3,805	4,407	
	Total ...	4,665	31,018	25,365	11	56,394	61,059	
1889-90	{ Kharif ...	3,862	30,608	24,540	...	55,148	59,010	
	{ Rabi ...	878	1,075	1,794	...	2,869	3,747	
	Total ...	4,740	31,683	26,334	...	58,017	62,757	
1890-91	{ Kharif ...	3,197	41,116	12,224	...	53,340	56,537	
	{ Rabi ...	1,328	5,127	6,305	...	11,432	12,760	
	Total ...	4,525	46,243	18,529	...	64,772	69,297	
Average	{ Kharif ...	3,677	29,509	21,303	6	50,818	54,495	
	{ Rabi ...	795	1,969	3,506	5	5,480	6,275	
	Total ...	4,472	31,478	24,809	11	56,298	60,770	
1891-92	{ Kharif ...	3,343	28,432	22,819	...	51,251	54,594	
	{ Rabi ...	2,423	3,208	6,583	...	9,791	12,219	
	Total ...	5,771	31,640	29,402	...	61,042	66,813	
Increase or Decrease.	{ Kharif ...	-334	-1,077	+1,515	-6	+433	+99	
	{ Rabi ...	+1,683	+1,239	+3,077	-5	+4,311	+5,944	
	Total ...	+1,299	+162	+4,592	-11	+4,744	+6,043	

This is the only statement in which Major canals show a satisfactory return, there being practically no Jāghirs on the Desert Canal. The total assessment amounted to Rs. 66,813, being Rs. 6,043 above the average, and is with one exception the highest of the six years.

13. The following statement gives the assessment on foreign land irrigated by Government Canals :—

STATEMENT B—2 (*vide* TABLE III A).

			MAJOR.		MINOR.			Grand Total
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
			Rs.					
1886-87	...	{ Kharif ...	39,928	.....	.....	...	...	39,928
	...	{ Rabi ...	2,155	.....	.....	...	...	2,155
		Total ...	42,083	.....	.....	...	...	42,083
1887-88	...	{ Kharif ...	59,766	.....	.....	...	...	59,766
	...	{ Rabi ...	2,892	.....	.....	...	...	2,892
		Total ...	62,658	.....	.....	...	...	62,658
1888-89	...	{ Kharif ...	66,156	.....	.....	...	...	66,156
	...	{ Rabi ...	10,239	.....	.....	...	...	10,239
		Total ...	76,395	...	.....	...	...	76,395
1889-90	...	{ Kharif ...	65,743	.....	.....	...	...	65,743
	...	{ Rabi ...	12,729	.....	.....	...	...	12,729
		Total ...	78,472	...	.....	...	...	78,472
1890-91	...	{ Kharif ...	61,969	.....	.....	...	...	61,969
	...	{ Rabi ...	1,778	.....	.....	...	...	1,778
		Total ...	63,747	.....	.....	...	...	63,747
Average	...	{ Kharif ...	58,713	.....	.....	...	...	58,713
	...	{ Rabi ...	5,958	.....	.....	...	...	5,958
		Total ...	64,671	.....	.....	...	...	64,671
1891-92	...	{ Kharif ...	29,859	.....	.....	...	...	29,859
	...	{ Rabi ...	10,831	.....	.....	...	...	10,831
		Total ...	40,690	.....	.....	...	...	40,690
Increase or De-	{ Kharif ...		—28,854	.....	.....	...	...	—28,854
crease.	{ Rabi ...		+4,873	.....	.....	...	...	—4,873
		Total ...	—23,981	.....	.....	...	...	—23,981

The results recorded in this statement refer wholly to assessment on land in Khelât watered by the Desert and Begári Canals, and are the most unsatisfactory for the year. The kharif assessments are Rs. 28,854 less than the average, due almost entirely to the Desert Canal. The rabi assessment shows a good increase of Rs. 4,873 above the average, owing to the good and late supply given by the Begári. The total assessment was Rs. 40,690, being 23,981 below the average.

14. The following statement gives the net consolidated assessment for the province, comprising the figures of the three preceding:—

STATEMENT B—3 (*vide* TABLE VII AND III A).

			MAJOR.		MINOR.			Grand Total
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	
1886-87	...	{ Kharif ...	6,55,725	12,83,604	16,61,863	2,725	29,48,192	36,03,917
	...	{ Rabi ...	76,216	99,139	2,99,501	8,185	4,06,825	4,83,041
		Total ...	7,31,941	13,82,743	19,61,364	10,910	33,55,017	40,86,958
1887-88	...	{ Kharif ...	7,39,475	12,73,773	16,88,541	2,428	29,64,742	37,04,217
	...	{ Rabi ...	93,193	1,46,067	3,01,503	5,520	4,53,090	5,46,283
		Total ...	8,32,668	14,19,840	19,90,044	7,948	34,17,832	42,50,500
1888-89	...	{ Kharif ...	9,37,048	14,37,293	18,63,387	2,746	33,03,426	42,40,474
	...	{ Rabi ...	1,47,058	1,99,351	2,41,046	4,741	4,45,138	5,92,196
		Total ...	10,84,106	16,36,644	21,04,433	7,487	37,48,564	48,32,670
1889-90	...	{ Kharif ...	9,40,876	14,75,429	18,63,774	5,240	33,44,443	42,55,319
	...	{ Rabi ...	2,17,866	3,25,711	3,99,764	5,820	7,31,295	9,49,161
		Total ...	11,58,742	18,01,140	22,63,538	11,060	40,75,738	52,34,480

			Major.		Minor.				Grand Total.
			Capital.		Capital.	Revenue.	Agricultural.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1890-91 ...	{ Kharif ...	...	8,34,684	15,59,227	18,34,603	2,651	33,96,481	42,31,165	
	{ Rabi ...	...	1,80,243	3,47,933	3,98,068	6,546	7,52,547	9,32,790	
	Total ...		10,14,927	19,07,160	22,32,671	9,197	41,49,028	51,63,955	
Average ...	{ Kharif ...	...	8,21,562	14,05,865	17,82,434	3,158	31,91,457	40,13,019	
	{ Rabi ...	...	1,42,915	2,23,640	3,27,976	6,163	5,57,779	7,00,694	
	Total ...		9,64,477	16,29,505	21,10,410	9,321	37,49,236	47,13,713	
1891-92 ...	{ Kharif ...	...	6,04,843	15,05,741	16,18,235	1,480	33,25,456	39,30,299	
	{ Rabi ...	...	2,45,391	3,79,737	5,49,483	5,301	9,34,521	11,79,912	
	Total ...		8,50,234	18,85,478	23,67,718	6,781	42,59,977	51,10,211	
Increase or De-	{ Kharif ...	...	-2,16,719	+99,876	+35,801	-1,678	+1,33,999	-82,720	
crease.	{ Rabi ...	...	+1,02,476	+1,86,097	+2,21,607	-862	+3,76,742	+4,79,218	
	Total ...		-1,14,243	+2,55,973	+2,57,308	-2,540	+5,10,741	+3,96,498	

The gross net assessment comes to Rs. 51,10,211, being Rs. 3,96,498 over the average and Rs. 53,744 below that of the previous year. The assessment on kharif shows a large decrease and that on rabi a larger increase. The returns from Major works are very unsatisfactory as already explained, their only redeeming point being the large increase in rabi assessment, due principally to the Begári and Sukkur Canals. On Minor works the results are very satisfactory, those under revenue being the highest yet recorded, while those from capital give an increase of Rs. 2,55,973 over the average, being exceeded by only one year's of the series.

15. In the following statement the figures given in the preceding ones are shown distributed under each district and the results compared with those of the average and of the previous year.

STATEMENT B—4 (vide TABLES VII AND III A).

Districts.		Major.		Minor.				Grand Total.	Total 1890-91.	Average 5 years.	Compar- ing 1890-91.	Compared average.
		Capital.	Revenue.	Capital.	Revenue.	Agricultural.	Total.					
Begári Canals ..	{ Kharif ...	2,65,882	...	...	...	1,480	1,480	2,67,362	4,76,362	5,09,227	-2,08,867	-2,41,865
	{ Rabi ...	1,17,215	...	...	...	5,791	5,791	1,22,516	63,382	44,938	+39,234	+77,518
	Total ...	3,83,097	...	...	...	6,781	6,781	3,89,878	5,39,744	5,54,225	-1,49,038	-1,64,347
Sukkur Canals.	{ Kharif ...	...	2,66,336	...	...	2,66,336	2,66,336	2,93,353	2,99,306	2,99,306	-27,017	-32,970
	{ Rabi ...	...	1,66,373	...	...	1,66,373	1,66,373	88,700	78,324	78,324	+11,673	+87,849
	Total ...	...	4,32,709	...	...	4,32,709	4,32,709	3,82,053	3,77,330	3,77,330	+50,656	+54,579
Ghár Canals ..	{ Kharif ...	7,50,421	...	...	...	7,50,421	7,50,421	7,64,653	6,95,367	6,95,367	-14,232	-45,054
	{ Rabi ...	2,83,253	...	...	...	2,83,253	2,83,253	2,54,014	1,65,250	1,65,250	+28,514	+1,37,703
	Total ...	10,33,674	...	...	...	10,33,674	10,33,674	10,19,667	8,59,917	8,59,917	+14,082	+1,82,762
Western Nára ..	{ Kharif ...	...	4,95,415	...	...	4,95,415	4,95,415	4,99,241	4,99,330	4,99,330	+3,174	-3,915
	{ Rabi ...	...	2,55,802	...	...	2,55,802	2,55,802	1,84,554	1,49,753	1,49,753	+69,248	+1,05,947
	Total ...	...	7,49,217	...	...	7,49,217	7,49,217	6,70,793	6,49,083	6,49,083	+72,422	+1,01,132
Eastern Canals.	{ Kharif ...	3,38,961	...	...	...	...	3,38,961	3,61,065	3,15,435	3,15,435	-22,104	-33,526
	{ Rabi ...	1,28,178	...	...	...	...	1,28,178	1,23,572	1,04,022	1,04,022	+4,152	+34,144
	Total ...	4,67,139	...	...	...	...	4,67,139	4,84,637	4,19,457	4,19,457	-17,435	-47,670
Hyderabad Canals.	{ Kharif ...	1,80,950	5,73,276	...	...	7,08,226	7,08,226	7,83,160	7,07,713	7,07,713	-13,934	-60,413
	{ Rabi ...	8,549	74,769	...	...	83,318	83,318	74,739	55,834	55,834	+27,484	+27,484
	Total ...	1,89,499	6,48,045	...	...	8,51,544	8,51,544	8,56,899	7,63,547	7,63,547	-5,352	-87,997
Fulci Canals...	{ Kharif ...	5,85,379	49,897	...	...	6,15,067	6,15,067	6,80,001	5,75,061	5,75,061	-34,004	-42,056
	{ Rabi ...	87,039	4,082	...	...	92,522	92,522	90,577	69,280	69,280	+23,242	+23,242
	Total ...	6,53,390	54,589	...	...	7,07,889	7,07,889	7,70,578	6,44,967	6,44,967	-22,340	-83,922
Karachi Canals...	{ Kharif ...	4,23,511	...	...	...	4,23,511	4,23,511	4,31,100	4,11,509	4,11,509	+7,049	+7,049
	{ Rabi ...	49,647	...	...	...	49,647	49,647	49,647	48,114	48,114	+1,533	+1,533
	Total ...	4,73,158	...	...	...	4,73,158	4,73,158	4,80,747	4,59,623	4,59,623	+20,525	+20,525
Total for Sind.	{ Kharif ...	6,04,843	15,05,741	18,18,235	1,480	33,25,456	39,20,299	33,21,172	40,13,019	40,13,019	-3,00,898	-82,720
	{ Rabi ...	2,45,391	3,79,737	5,49,483	5,301	9,34,521	11,79,912	9,32,790	12,00,694	12,00,694	+2,47,122	+1,70,211
	Total ...	8,50,234	18,85,478	23,67,718	6,781	42,59,977	51,10,211	51,10,211	51,13,713	51,13,713	-3,744	-3,96,498

In this statement, as in the similar one for cultivation A (4), the Begári Canal District shews worst. The returns from the Shikárpur, Ghár, Western Nára, and Karáchi Canals Districts compare favourably with the average and with those of the previous year, while in the Eastern Nára, Fuleli, and Hyderabad Districts the comparison with 1890-91 is unfavourable.

In comparing the figures in this and other statements of assessments with those for cultivation given in the preceding series, some anomalies in the relation between assessment and cultivation are apparent. There are several reasons for these—the assessment varies with the kind of crop, the area of dubari cultivation is not shown as an increase to area of cultivation, while the assessment on it adds to the revenue, and the grant of remissions affects the net assessment, but not the area of cultivation. The total assessment on dubari cultivation for the province is included in figures for net consolidated assessment, but could not be given separately.

16. The canal revenue for the year has to be increased by a sum of Rs. 39,233 on account of net consolidated assessment on unauthorized cultivation. The detail of these figures is given below, and they are not included in any of the statements or tables of this report :—

Names of Canals.	ASSESSMENTS.			REMISSEMENTS.			Net consolidated assessments.	Irrigation share.	Land share.
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10
<i>Eastern Nára District.</i>	Ra.	Rs.	Rs.	Ra.	Rs.	Rs.	Rs.	Rs.	Rs.
No details ...	...	...	19,327	...	...	...	19,327	17,394	1,933
<i>Hyderabad Canals District.</i>									
Mehrábwáh ...	332	7	339	...	...	...	339	305	34
Nasrat ...	156	4	160	...	...	...	160	144	16
Nsolakhi ...	101	...	101	...	...	...	101	91	10
Dambro ...	7	...	7	...	...	...	7	6	1
Dad ...	270	45	315	...	...	...	315	284	31
Renwáh ...	918	2	920	...	...	...	920	828	92
Alibáhar Kacheri ...	2,278	...	2,278	...	...	...	2,278	2,050	228
Marak ...	6,770	...	6,770	...	...	...	6,770	6,093	677
Gháro Mahmuda... ..	1,074	...	1,074	16	...	16	1,058	952	106
Kari Shumáli ...	1,287	...	1,287	12	...	12	1,275	1,148	127
Nasirwáh ...	526	18	544	18	17	35	509	458	51
Sarfráz ...	300	9	309	4	...	4	305	274	31
Other Canals ...	279	26	305	...	...	...	305	274	31
	14,298	111	14,409	50	17	67	14,342	12,907	1,435
<i>Fuleli Canals District.</i>									
Fuleli ...	7,788	1,140	8,928	79	...	79	8,849	7,964	885
Other Canals ...	878	206	1,084	9	...	9	1,075	968	107
	8,666	1,346	10,012	88	...	88	9,924	8,932	992
GRAND TOTAL ...	22,954	1,457	43,748	138	17	155	43,593	39,233	4,360

This assessment is levied on unoccupied waste land cultivated without permission or previous intimation to the Revenue Officers. Information regarding it was received too late for use in the preparation of the returns, on which this report is based : but the figures will in future be given in their proper place. The returns from the Eastern Nára are not yet quite correct, as they include some small sums due to barani cultivation.

The net consolidated revenue for the province, as given in the tables, &c., is Rs. 45,02,441 ; by adding the assessments on unauthorized cultivation, the total comes to Rs. 45,41,674 or Rs. 13,859 in excess of the revenue of the previous year.

17. The following statement shews the total for collection and the actual realizations on Government land for the year for the five revenue districts :—

STATEMENT (vide TABLE VI A).

Districts.	Unrealized balance at end of year.	Deduct Remissions on account of former years.	Net amount realizable on account of outstanding at beginning of year.	Net consolidated assessment during year as per (Caval Return VIII.	Total for Collections.	Actual Receipts during year.	Balance outstanding at end of year.	Irrigation share of collection.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Upper Sind Frontier	34,807	2,763	32,044	3,93,542	4,25,586	3,33,934	41,652	3,45,540
Shikárpur	22,712	18,534	6,838	19,22,148	19,35,906	19,34,446	560	17,81,933
Thar and Párkar	716	..	716	4,34,014	4,34,230	4,34,703	527	3,51,222
Hyderabad	505	..	622	15,39,191	15,39,513	15,39,064	749	13,58,159
Karáchi	25,461	9,461	16,020	7,07,313	7,23,333	7,08,900	14,433	6,35,010
1891-92	85,521	29,281	66,360	50,02,708	50,58,968	50,01,047	57,921	45,00,944
1890-91	71,920	8,251	63,669	50,30,911	50,04,580	50,09,113	85,467	45,05,201
Increase or Decrease ..	+13,601	+21,010	-7,409	-28,398	-35,612	-8,066	-27,546	-7,257

* Differs from figures given in last year's report by Rs. 54 and has been communicated as correct by Deputy Commissioner, Upper Sind Frontier.
 Note.—The assessments on unauthorized cultivation are not included in these figures.

The total for collection shows a falling off of Rs. 35,612 compared with that of the previous year. This is made up of a large decrease of Rs. 1,27,067 in Upper Sind Frontier District and of smaller deficiencies of Rs. 14,306 and Rs. 25,182 on Thar and Párkar and Hyderabad respectively, Shikárpur and Karáchi contributing an increase of Rs. 98,328 and Rs. 32,615 respectively. The outstanding balances compare favourably with those of the previous year, in that their total is less by Rs. 27,546. The reduction is marked in all districts except the Upper Sind Frontier, in which there is an increase of Rs. 6,899.

18. In the following statement are shown the area of cultivation and the assessment of Jágírh and forágn lands, the unrealized balances at end of last year, the actual realizations and the outstanding balances of the year under report:—

STATEMENT C—1 (vide TABLE III A).

Districts.	Area cultivated during year.			Unrealized balance at end of last year.	Amount of assessment of the year.	Total for collection.	Remissions.	Net total realizable.	Actual realization during year.	Balance outstanding at end of year.	Remarks
	Kharif.	Rabi.	Total.								
1	2	3	4	5	6	7	8	9	10	11	12
Khelt Land (Foreign).	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1891-92	39,891	10,581	50,722	23,734	50,725	74,459	10,035	64,424	20,741	43,683	
1890-91	61,996	1,778	63,744	12,768	63,747	76,505	..	76,505	62,770	23,736	
Increase or decrease ..	-22,075	+9,053	-13,022	+10,976	-13,022	-2,046	+10,035	-12,081	-32,029	+19,948	
Jágírh Lands in Sind.											
Upper Sind Frontier ..	743	198	941	7	467	474	..	474	369	105	
Shikárpur	22,673	12,333	35,526	5,246	15,112	20,358	..	20,358	15,768	4,592	
Thar and Párkar	1,338	548	2,384	4	1,189	1,189	..	1,182	1,182	..	
Hyderabad	99,184	7,615	1,06,999	7,285	40,265	47,550	..	47,550	44,529	3,021	
Karáchi	12,959	6,383	19,342	2,928	9,801	12,729	..	12,729	9,550	3,179	
1891-92	1,37,397	27,798	1,65,192	15,480	65,813	82,293	..	82,293	71,396	10,897	
1890-91	1,41,375	43,197	1,84,572	14,369	69,297	83,666	..	83,666	68,219	15,447	
Increase or decrease ..	-3,978	-15,402	-19,380	+1,111	-2,484	-1,373	..	-1,373	+3,177	-4,550	
Total for (1891-92 ..	1,27,258	38,626	2,15,914	39,214	1,17,538	1,66,762	10,066	1,46,717	92,137	54,580	
Province. (1890-91 ..	2,03,841	44,975	2,48,816	27,127	1,38,944	1,63,171	..	1,63,171	1,20,959	39,182	
Increase or Decrease ..	-26,653	-3,469	-32,402	+12,087	-15,506	-3,419	10,035	-13,454	-28,822	+15,398	

NOTE (1).—The balances brought forward in column 5 do not agree with those given in last year's report, but they have been communicated as correct by Revenue Department.

Add.—Realized by Public Works Department:—
 Rs. 1,137 as per Table III-A.
 263 as per Table III.

92,400

The figures of cultivation and revenue do not require any remarks here, as they have already been explained under preceding statements. The total for collection, the net total realizable and the actual realizations, all show a falling off as compared with those of the previous year. These results are unsatisfactory and due to causes already explained. The remission of Rs. 10,035 shown against Khelát was for the previous year, but sanctioned only in 1891-92. The outstanding balances amount to Rs. 54,580, made up of Rs. 43,683 for Khelát and Rs. 10,897 for British Jágírh. The increase in the former is Rs. 19,948 and in the latter there is a good reduction of Rs. 4,550. In Khelát apparently the returns are made up on the 31st March, before the third instalment of revenue is due, so the sums unpaid are not properly outstandings.

19. Statement C—2 following shows miscellaneous canal revenue (collections) for the year under review and five previous years :—

STATEMENT 2 (*vide* TABLE III).

Year.	District.								Total.
	Begari Canals.	Shikarpur Canals.	Gdar Canals.	Eastern Nara.	Western Nara.	Hyderabad Canals.	Fuleli Canals.	Karachi Canals.	
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	883	1,960	4,189	16,526	10,128	3,879	6,131	4,761	48,457
1887-88	947	2,073	4,543	15,173	10,944	3,367	4,833	3,440	45,290
1888-89	957	2,164	4,600	15,824	12,735	3,987	4,809	4,468	49,604
1889-90	821	4,035	7,201	15,708	12,070	3,993	4,299	7,040	55,167
1890-91	1,045	2,209	7,003	18,785	11,542	3,976	4,165	6,380	55,105
Average	931	2,488	5,507	16,403	11,496	3,828	4,857	5,218	50,728
1891-92	935	3,324	9,650	15,567	17,530	4,724	6,871	5,298	63,909
Increase or decrease...	+4	+846	+4,143	-836	+6,034	+896	+2,014	+80	+13,181

The result for each district, with one exception, is an increase compared with the average, the gross result for the province being an increase of Rs. 13,181.

20. The actual realizations of the year under their several heads are given in the following statement and compared with those of the five preceding years and with the average :—

STATEMENT C—3 (*vide* TABLE VI A.).

Years.	GOVERNMENT.	FOREIGN LANDS IN KHELAT AND JAGHIR LAND IN SIND.		Miscellaneous.	Per cent. of Irrigation share of pro- ceeds of sales of occupancy rights.	Total actual receipts.
	Irrigation share of net consolidated Assessment collected.	Hakaba.				
		Foreign.	Jághir.			
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87	36,09,629	78,477	61,552	48,457	...	37,98,115
1887-88	37,46,333	58,925	53,578	45,290	...	39,04,126
1888-89	42,15,214	1,17,173	76,962	49,604	...	44,58,953
1889-90	45,56,187	92,443	60,203	55,167	11,072	47,75,972
1890-91	45,08,201	52,770	68,620	55,105	15,066	46,99,762
Average	41,27,113	79,958	64,183	50,725	5,228	43,27,207
1891-92	45,00,944	20,741	71,659	63,909	20,622	46,77,875
Increase or Decrease	+3,73,831	—59,217	+7,476	+13,184	+15,394	+3,50,668

NOTE.—52,913 acres of land were sold during year.

Compared with the average the receipts are all satisfactory, with the exception of those from hakaba on foreign land.

The gross canal revenue realized during the year amounted to Rs. 46,77,875, exceeding the average by Rs. 3, 50,668, and being only Rs. 21,907 less than that of 1890-91.

During the year the right of occupancy for 52,913 acres was sold, yielding Rs. 20,622.

21. The remissions for the seven years ending 1891-92 in each canal district are given in the following statement:—

STATEMENT D.

Districts.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	Average.	1891-92.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canals	10,708	20,335	13,032	16,116	26,930	7,704	15,804	1,06,401
Shikárpur Canals	123	668	101	174	45	916	338	2,060
Ghár Canals	1,05,081	92,277	21,387	3,564	61,745	1,994	47,675	2,557
Western Nára	17,127	4,903	4,173	18,941	43,138	563	14,807	7,360
Eastern Nára	4,413	43	177	874	4,996	2,224	2,121	...
Hyderabad Canals	2,757	3,418	3,031	3,809	8,817	10,349	5,363	1,012
Fuleli Canals	1,413	707	3,203	976	30,918	2,664	6,647	1,268
Karachi Canals	14,794	14,068	16,833	18,591	56,853	41,431	27,095	23,306
Total	1,56,416	1,36,419	61,937	63,045	2,33,442	67,845	1,19,850	1,43,964

The figures given in this statement explain the returns for the year so far as they are unsatisfactory. In the Begári Canals District, although the supply in the Desert Canal was very bad, the greater part of the very large sum remitted is on account of the damage done by locusts. In the Karáchi Canals District the remissions are below the average, and are almost all due to floods from breaches in river-embankments and from spill from the Baghiar. In the Shikárpur District locusts are responsible for the unusually large loss. From the other districts the returns are satisfactory, and with the exception of a small deficiency of supply in the Ghár, the cause of the remissions is not connected with the canals.

22. The following statement is given to show the loss to canals represented by the difference in rates on Government and other land:—

STATEMENT E—(vide TABLE).

Class of Works.	Hakába at present assessment.	Loss.	Jághir Revenue at full rates.	Water share of Government Land Assessment.	Total what it should be for the Province.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Major. { Foreign	50,725	40,580	91,305	...	91,305
Works. { Jághir	5,771	81,107	36,878	7,23,397	7,60,275
Minor Works, Capital, Jághir ...	31,640	1,81,945	2,13,585	16,68,455	18,82,040
Do. Revenue do.	29,402	1,67,926	1,97,328	21,10,589	23,07,917
Total	1,17,538	4,21,558	5,39,096	*45,02,441	50,41,537

* Includes works for which neither Capital nor Revenue accounts are kept, Assessment on unauthorized cultivation 45,02,441
... .. 39,233
... .. 45,41,674

The total loss is Rs. 4,21,558, the assessment at present levied being only Rs. 1,17,538, which at full rate would have been Rs. 5,39,096. In the case of Major works the loss of Rs. 71,687 from this cause is serious and if realized, would make a great difference in the financial accounts of the Begári and Desert Canals. The total loss is less by Rs. 67,792 than that of last year, owing to less cultivation, chiefly on Desert Canal.

23. The expenditure on maintenance and repairs of canals and river embankments, and the cost of establishment and revenue collection, are shown in the following statement:—

STATEMENT G—(vide TABLE IV).

Years.	MAINTENANCE AND REPAIRS.																			
	Major Works.			Minor Works.										Total.			Establishment proper.	Total.	Revenue Collection charges.	Total.
	Capital.			Capital.			Revenue.			Agricultural.			Total.							
	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1884-87	...	...	1,10,178	...	...	2,32,347	...	...	3,97,738	...	...	87,659	6,12,696	2,15,236	8,37,922	2,71,980	10,99,559	3,29,704	14,29,246	
1887-88	...	...	1,21,629	...	...	3,12,389	...	...	5,14,134	...	...	93,158	5,34,018	2,07,483	10,41,304	2,61,116	13,02,617	3,42,170	16,44,787	
1888-89	...	...	1,22,142	...	...	3,39,765	...	...	5,93,760	...	...	65,262	7,21,023	1,99,428	9,20,449	2,61,271	11,81,720	3,91,630	15,73,350	
1889-90	...	...	1,52,102	...	...	8,24,758	...	...	4,04,350	...	...	79,327	7,83,915	1,81,692	9,65,517	2,49,041	12,14,559	4,73,904	16,38,462	
1890-91	...	...	1,29,954	...	...	3,41,599	...	...	4,36,746	...	...	69,043	8,01,214	1,76,101	9,77,315	2,44,759	12,22,074	4,32,001	16,44,075	
Average 1891-92	...	...	1,27,199	...	...	3,10,102	...	...	4,30,350	...	...	18,890	7,50,573	1,83,963	9,46,541	2,57,623	12,04,164	3,81,899	15,85,954	
1891-92	94,171	37,748	1,31,919	2,68,340	34,628	3,06,977	4,02,054	77,413	4,79,467	38,403	33,412	69,817	8,00,979	1,87,201	9,88,180	2,57,160	12,45,340	4,24,528	16,69,868	
Difference	...	...	+4,720	...	...	-3,125	...	...	+49,117	...	...	-5,073	+50,406	-8,767	+41,639	-463	+41,176	+42,738	+83,914	

Note.—(1) Figures for Establishment charges for each financial head separately previous to 1891-92 are not available.
(2) Revenue collection charges are based at 10 per cent. on collections.

The outlay of the year on maintenance and repairs amounts to Rs. 9,88,180, being Rs. 41,639 and Rs. 10,865 above the average and that of previous year, respectively. On establishment charged to works the expenditure was Rs. 1,87,201, being Rs. 8,767 less than the average, but Rs. 11,100 above that of 1890-91. This excess is not due to increase of establishment, but to an attempt at more correct classification of expenditure under this head, not yet complete. There was some difficulty, especially in the Shikarpur and Hyderabad Districts, in correctly separating charges under "Works" and "Establishment," and when the re-organization of the latter is in better working the apparent excess will disappear. The charge on account of establishment proper is a little less than the average, while that for revenue collection varies with the collections. The total charge for the year amounts to Rs. 16,69,895, or Rs. 83,914 above the average.

The following abstract gives detail of expenditure on different kinds of work in each district:—

ABSTRACT (vide TABLE VI).

Name of District.	Clearance proper in Canals.		Jungle cutting.	Removing toolas.	Improving canal-heads.		Side sloping and repairing curves.		Buildings and Gardens.	Regulators, Bridges and Sluices.	Repairs to Canal-banks.		Removing spoil and Inspection paths.
	Cubic feet.	Cost.			Cubic feet.	Cost.	Cubic feet.	Cost.			Cubic feet.	Cost.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs.				Rs.		Rs.				Rs.	
Begri Canals ...	15,118,391	59,402	595	289	...	...	...	...	1,422	226	.....	812	...
Shikarpur Canals ...	3,786,587	37,069	2,649	3,228	...	...	...	...	710	347	1,066,747	5,273	106
Ghar Canals ...	11,533,816	44,291	217	4,945	...	...	77,000	385	4,452	2,417	3,231,779	12,467	42
Western Nira ...	8,696,880	27,881	718	2,334	...	...	...	...	2,503	1,623	2,367,431	8,194	...
Eastern Nira ...	2,486,715	8,913	2,631	246	...	...	...	...	1,336	4,447	1,653,451	6,721	1,696
Hyderabad Canals ...	44,015,827	1,96,460	2,708	8	1,714,944	5,028	...	...	1,164	...	2,143,116	8,213	4
Fuleli Canals ...	39,564,328	1,31,129	2,851	1,542	...	8	1,201,329	3,973	286	1,928	2,861,048	10,317	...
Karachi Canals ...	15,446,319	43,712	2,994	3,098	...	...	1,189,571	3,967	545	15,549	8,223,730	26,191	...
Total ...	145,617,063	5,08,867	15,421	13,798	1,714,944	5,036	2,467,910	8,335	12,618	26,553	21,647,992	78,188	1,817

Name of District.	Repairs to River-embankment.		Improvements to Loops, &c., River-embankment.		Protecting slopes of Embankments and Canals.	Miscellaneous.	Centingencies.	Extraordinary Abkaláni expenditure, closing balances, &c.	Total Works.	Establishment.				Total works and establishment.
	Cubic feet.	Cost.	Cubic feet.	Cost.						Abkaláni.	Revenue.	Works.	Total.	
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canals ...	...	3,466	...	...	...	2,239	1,136	136	65,642	24,986	4,044	2,062	31,682	97,224
Shikárpur Canals ...	129,732	11,989	...	7,175	524	2,931	121	...	70,283	12,995	1,295	6,478	19,978	90,261
Ghár Canals ...	470,463	2,793	...	...	...	7,850	736	...	79,751	14,488	2,097	7,201	23,786	1,09,537
Western Nára ...	1,245,202	4,957	...	153	816	1,333	604	930	61,399	10,791	2,494	3,909	17,094	68,493
Eastern Nára ...	...	...	...	...	...	3,709	...	5,322	34,944	8,742	3,265	9,923	21,930	56,574
Hyderabad Canals ...	...	...	...	...	...	5,840	...	707	1,94,090	8,873	3,272	20,402	31,547	2,15,907
Fuleli Canals ...	491,678	1,694	...	...	3,668	386	1,701	1,222	1,59,169	6,700	8,474	5,790	14,964	1,74,163
Karachi Canals ...	14,169,089	44,724	2,899,883	10,044	1,432	2,568	785	4,945	1,55,701	15,431	4,162	6,727	26,320	1,82,021
Total ...	16,515,064	69,573	2,899,883	17,572	6,440	26,876	5,083	13,252	8,00,979	1,02,216	22,103	62,882	1,87,201	9,88,189

24. The following statement gives the expenditure on Works and Work Establishment for each district:—

STATEMENT G—1 (*vide* TABLE IV).

Districts.	1888-89.					1889-90.				
	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.
		Supervising.	Abkaláni.	Total.			Supervising.	Abkaláni.	Total.	
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canals ...	59,996	12,991	44,716	57,707	1,17,703	87,622	13,064	36,041	49,125	1,36,754
Shikárpur Canals ...	35,728	4,670	14,303	18,973	54,701	69,717	4,341	10,330	14,671	84,383
Ghár Canals ...	1,16,172	8,865	27,327	36,192	1,54,364	1,02,594	5,062	32,006	40,068	1,47,512
Western Nára ...	...	...	...	...	...	...	...	...	...	...
Eastern Nára ...	27,826	4,489	14,666	19,065	46,891	29,437	4,043	16,364	20,407	49,844
Hyderabad Canals ...	1,98,156	20,005	20,605	21,610	2,19,761	1,59,945	21,322	...	31,562	1,81,507
Fuleli Canals ...	1,86,012	156	15,661	16,417	2,02,430	2,00,441	5,397	6,296	11,693	2,12,134
Karachi Canals ...	94,103	...	30,476	30,467	1,24,569	1,34,242	5,296	18,510	23,806	1,58,048
Total ...	7,21,023	52,296	1,47,130	1,99,426	9,20,449	7,83,915	62,065	1,19,547	1,81,602	9,65,517

Districts.	1890-91.					1891-92.				
	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.
		Supervising.	Abkaláni.	Total.			Supervising.	Abkaláni.	Total.	
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begári Canals ...	57,525	14,101	22,334	36,525	94,050	65,642	6,596	24,966	31,562	97,224
Shikárpur Canals ...	60,936	4,777	9,662	14,399	75,275	70,283	7,773	12,265	19,978	90,261
Ghár Canals ...	97,107	8,864	18,123	27,037	1,24,144	79,751	9,298	14,488	23,786	1,09,537
Western Nára ...	64,747	5,946	15,444	19,390	84,137	61,399	6,303	10,791	17,994	68,493
Eastern Nára ...	39,355	7,965	12,512	21,477	60,832	34,944	13,188	8,742	21,930	56,574
Hyderabad Canals ...	1,65,200	12,570	7,965	20,535	1,88,735	1,84,060	22,674	8,873	31,547	2,15,907
Fuleli Canals ...	1,80,923	8,561	7,785	16,337	1,98,360	1,59,169	8,264	6,700	14,964	1,74,163
Karachi Canals ...	1,38,321	6,244	14,317	20,461	1,53,782	1,55,701	10,889	15,431	26,320	1,82,021
Total ...	8,91,214	69,118	1,06,963	1,76,101	9,77,315	8,00,979	64,935	1,02,216	1,87,201	9,88,189

In this statement the cost of establishment charged to works is divided into two heads—Supervising and Abkaláni. Under the former is included all establishment engaged in supervision of works and general conservancy, and under the latter the establishment employed to watch canal-banks and river-embankments during the inundation. As explained under preceding statement there is an increase for the year of Rs. 11,100, the expenditure on Supervising Establishment being Rs. 15,867 more and that on Abkaláni Rs. 4,767 less than in 1890-91.

25. The following statement shows the expenditure (Maintenance and Repairs) incurred on canals and river-embankments separately and the cost of establishment proper, and the debit to each for revenue collection :—

STATEMENT G—2 (*vide* TABLE IV).

Works.	CANALS.					RIVER-EMBANKMENTS.				
	Works.	Establishment.	Total.	Revenue collections.	Total.	Works.	Establishment.	Total.	Revenue collections.	Total.
	1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	7,11,982	2,19,200	9,31,182	3,14,002	12,45,184	1,19,166	29,324	1,48,490	2,213	1,50,703
1886-87	6,62,498	2,23,334	8,85,832	3,28,154	12,13,986	1,05,424	48,596	2,14,020	1,340	2,15,360
1887-88	8,58,758	2,21,266	10,80,024	3,41,424	14,21,448	1,82,743	39,850	2,22,593	746	2,23,339
1888-89	8,03,156	2,30,902	10,34,058	3,90,914	14,14,972	1,17,293	40,369	1,57,662	716	1,58,378
1889-90	8,64,912	2,18,617	10,83,529	4,22,862	15,07,391	1,00,605	29,424	1,30,029	1,042	1,31,071
1890-91	8,56,709	2,07,731	10,64,440	4,21,102	14,85,542	1,20,606	37,028	1,57,634	899	1,58,533
Average	7,53,003	2,18,672	10,11,675	3,69,743	13,81,428	1,34,306	37,432	1,71,738	1,143	1,72,881
1891-92	8,36,789	2,08,405	10,45,194	4,23,919	14,69,113	1,51,391	43,755	2,00,146	630	2,00,785
Difference	+43,786	-10,267	+33,519	+54,170	+87,685	+17,055	+11,323	-28,408	-604	+27,804

Note.—The figures in column 2 include Establishment chargeable to Works.

The outlay on maintenance and repairs of canals was almost the same as in the previous year, but it exceeded the average by Rs. 43,786. The cost of establishment was also very nearly the same, but less than the average by Rs. 10,269.

The debit for revenue collection is merely a percentage of the revenue and needs no remarks. The expenditure on river-embankments exceeded that of the previous year by Rs. 30,785 and the average by Rs. 17,085. This increase is due to the great damage done to the embankments in the Karachi Canals District during the previous inundation, and it includes a sum of Rs. 10,596 expended on the construction of loop bunds, not usually debited to the Maintenance Grant. This also accounts for the increase on establishment charges.

The total charge to canals was Rs. 14,69,113 or Rs. 250 per mile, and to river-embankments Rs. 2,00,785 or Rs. 305 per mile.

26. Statement G—3 following shows the expenditure on New Works (Major and Minor) under its several sub-heads :—

STATEMENT G—3 (*vide* TABLE IV AND STATEMENT I—B).

Capital Works and Improvements.

Years.	MAJOR.							MINOR.		
	Capital.			Revenue.			Grand Total, Major.	Capital and Revenue Accounts.		
	Works.	Establishment.	Total.	Works.	Establishment.	Total.		Capital.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Works.	Establishment.	Total.
1886-87	1,92,907	41,937	2,34,844	...	.....	...	2,34,844	.....	...	...
1887-88	1,39,476	47,750	1,87,226	...	.....	...	1,87,226	.....	...	...
1888-89	92,352	21,950	1,14,302	...	.....	...	1,14,302	47,000	9,400	56,400
1889-90	60,602	16,141	76,903	1,508	917	2,425	79,223	45,144	9,029	54,173
1890-91	63,661	15,726	79,387	21,424	6,572	27,996	1,07,383	17,474	3,495	20,969
Average	1,06,811	28,701	1,38,512	4,536	1,493	6,034	1,44,596	21,924	4,384	26,308
1891-92	70,699	18,355	89,054	61,851	19,646	81,479	1,70,551	36,102	7,151	43,253
Difference	-39,112	-10,346	-49,458	+57,266	+18,143	+75,413	+25,955	+14,173	+2,767	+16,945

Minor—continued.												
Year.	Capital and Revenue Accounts—continued.			Revenue.			Agricultural.			Grand Total, Minor.	Total of Major and Minor.	
	Revenue.			Works.	Establishment.	Total.	Works.	Establishment.	Total.			
	Works.	Establishment.	Total.									
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1886-87	25,494	7,667	33,161	67,082	20,074	87,156	1,19,547	22,084	1,35,631	2,20,262	4,35,100	
1887-88	17,582	9,226	26,808	43,342	12,300	55,642	86,526	20,160	1,06,686	2,04,008	3,94,322	
1888-89	67,770	15,737	83,507	42,218	23,683	65,901	21,061	7,004	28,065	2,25,409	3,29,711	
1889-90	12,607	2,582	15,189	1,58,278	24,021	1,82,299	1,46,314	37,183	1,83,497	4,15,006	5,24,278	
1890-91	274	55	329	2,17,308	33,979	2,51,287	1,13,714	31,600	1,45,314	4,11,720	5,24,612	
Average	21,567	5,060	26,626	7,05,596	22,820	7,28,416	96,653	23,486	1,20,140	3,08,609	4,53,005	
1890-92	46,506	3,729	50,235	1,33,115	29,597	1,62,712	49,352	12,351	61,703	2,92,594	4,63,445	
Difference	-3,061	-2,219	-5,280	+29,580	+6,777	+36,356	-17,306	-11,135	-28,441	-15,115	+10,440	

The expenditure on Major works amounted to Rs. 1,32,550 or Rs. 47,465 more than that of the previous year. Of this sum, Rs. 70,699 were debited to capital and Rs. 61,851 to revenue. The capital expenditure was almost all incurred on the Eastern Nára, in completing embankments above Thar Canal, constructing Jamras, Saria and Rata sluices, bridges on the Mithrao and commencing the Jatri-Keti clearance. The revenue expenditure was in connection with the Desert Canal, for which a new mouth was commenced leading into an abandoned channel, in which also heavy excavation was made. Under the main head minor works the only capital expenditure was in the Fuleli District, where Rs. 36,102 were spent on the new Fuleli regulators and on the construction of chowkies for the Engineering and Subordinate Staff. Rs. 16,506 were spent on works debited to the revenue account of those for which capital and revenue accounts are kept, principally on the Fuleli and Ren Canals. On works for which only revenue accounts are kept the outlay amounted to Rs. 1,38,115 or Rs. 79,093 below that of previous year. On agricultural works Rs. 49,352 were spent, being less than that of the previous year by Rs. 64,362. The total expenditure under all heads, including establishment, amounted to Rs. 4,63,445, exceeding the average by Rs. 10,440, but falling short of that of 1890-91 by Rs. 61,167.

The works on which the expenditure shown in this statement was incurred have been fully described in the administration report for the year and it appears unnecessary to report the account therein given.

They are, however, catalogued under proper sub-heads below :—

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
1		2	3	4	5
		MAJOR WORKS.		Rs.	Rs.
		CAPITAL ACCOUNT.			
		<i>Desert Canal.</i>			
1	Begári Canal	Extensions and improvements of Rājwah.	To improve supply	3,232	3,232
		<i>Nara.</i>			
2	Eastern Nára	Embankments, right bank, Nára, from Khipra to head of Thar Canal.	To prevent breaches and protection against flood.	11,675	
3	Do.	Raising Nára Bunds from Khakaho to Kilankhar.		8,291	
4	Do.	Constructing regulator over Jamrao Sang.	To pass flood-water	9,826	
5	Do.	Constructing sluice in Rata Bund at Saria Sang.	To provide water for lands belonging to His Highness Mir Ali Murad.	1,167	
6	Do.	Constructing sluice in Rata Bund at Rata Sang.		1,277	
7	Do.	Deepening and enlarging the Nára from the head of Jatri channel to Ketí.	To facilitate early supply and discolored water for the Thar Canal.	5,535	
		<i>Mithrao Canal.</i>			
8	Do.	Constructing an iron road bridge in 28th mile of Mithrao Canal.	To replace old wooden trestle bridge.	253	
9	Do.	Constructing bungalow with out-houses at Samara.	To accommodate officers on inspection duty.	3,087	
10	Do.	Constructing an iron road bridge over Mithrao Canal, 14th mile.	To replace old wooden trestle bridges.	3,061	
11	Do.	Constructing an iron road bridge over Mithrao Canal at 20th mile.	Do. do.	1,887	
12	Do.	Shifting banks of Mithrao Canal	To save berm being carried away by current.	19,156	
		<i>Dimwah.</i>			
13	Do.	Road bridge	For passengers and traffic	847	
		<i>Thar Canal.</i>			
14	Do.	Masonry karia head, Thar Canal.	.....	— 11	
15	Do.	Do. do. U mark of branch.	.....	— 142	
16	Do.	Do. do. Chor branch.	.....	— 84	
17	Do.	Constructing sluice at 4th mile 4 furlong of Chor branch <i>ex.</i> Thar Canal.	Regulating supply	1,641	
Total Major Works					67,467
— Capital				...	70,699

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
	1	2	3	4	5
		MAJOR WORKS.		Rs.	Rs.
		REVENUE ACCOUNT.			
		<i>Desert Canal.</i>			
1	Begári Canal	... Excavating new mouth of Desert Canal.	To ensure full supply of water in the canal, the river having changed its course.	33,540	
2	Do.	... Constructing an escape sluice and channel, Desert Canal.		1,276	
		<i>Begári Canal.</i>			
3	Do.	... Cleaning and widening of the Begári Canal.	To improve supply	25,204	60,020
		<i>Nára.</i>			
4	Eastern Nára	... Sluice in Rata Bund at Saria Sang.	} <i>Vide items 5 and 6</i> ... }	—10	
5	Do.	... Sluice in Rata Bund at Rata Sang, Thar Canal.		361	
6	Do.	... Constructing a sluice in 4th mile 4 furlongs of Chor branch, ex. Thar Canal.	To regulate supply	1,480	1,831
			Total, Major Works—Revenue Account ...	...	61,851
		MINOR WORKS.			
		CAPITAL ACCOUNT.			
		<i>Fuleli Canal.</i>			
1	Fuleli Canal	... Constructing a regulator over old Fuleli at Nareja.	To control supply and to protect cultivation.	19,773	
2	Do.	... Constructing a regulator over old Fuleli at Alipur.	To control supply in Dehro Mohabat, Tando Bago and Guni.	10,877	
3	Do.	... Constructing inspection chaukis.	.....	5,452	36,102
			Total Minor Works—Capital Account ...	...	36,102
		WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.			
		REVENUE ACCOUNT.			
		<i>Ghár Canal.</i>			
1	Ghár Canal	... Constructing sluice over a karia of Nawazali Shamir, ex. Nasrat.	To replace one carried away by floods.	282	282
		<i>Sarfrazwah.</i>			
2	Hyderabad Canal	... Constructing an embankment on the right bank of Sarfrazwah.	To prevent excessive deposit of silt.	9,307	9,307
		<i>Fuleli.</i>			
3	Fuleli Canal	... Excavating new mouth of Kamal and Jamwah.	To improve supply at tail	} 6,917	
		... Constructing head regulator over Wadhuwah.	To control supply and prevent flooding at tail.		6,917
			Total, Minor Works—Revenue Account ...	...	16,506

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
1		2	3	4	5
		WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.		Rs.	Rs.
		<i>Canals in Rohri.</i>			
1	Shikárpur Canal ...	Fixing bench marks in Rohri District.	To ensure scientific accuracy and proper supervision of canal clearance and other works.	1,386	
2	Do. ...	Widening Deharwah ...	To improve supply and extend cultivation.	260	1,646
		<i>Western Nára.</i>			
3	Western Nára ...	Extension of Upper Nurwah ...	.....	1,913	
4	Do. ...	New feeder to Western Nára and improvements to main canal.	To augment water-supply in Western Nára in Mehar and Sehwan Tálukas. ...	48,259	
5	Do. ...	Excavation of a feeder to Lohri-wah. ...	To improve supply in Johi Táluka. ...	6,010	
6	Do. ...	Excavation of a feeder to Pritchard Canal.	To augment water-supply in Western Nára. ...	49,236	1,05,418
7	Hyderabad Canals.	Surveying Nasrat ...	.....	122	
8	Do. ...	Do. Naolákhi ...	.....	200	
9	Do. ...	Extension of Mirwah, ez: Dad-wah.	To improve supply and extend cultivation. ...	406	
10	Do. ...	Improvements to Ranwah ...	To improve supply in Sakrand Táluka and extend cultivation.	6,493	
11	Karáchi Canals ...	Chandans in Sháhbandar Pinyar Canal.	For drainage of swamps ...	2,994	7,221
12	Do. ...	New loop bund (Mirzawah) near Bahadipur Bunds, left bank.	To prevent breaches and protect cultivation.	9,837	
13	Do. ...	Extending Hillaya Bunds, right bank.		7,159	
14	Do. ...	Grant-in-aid for repairing river embankments, Sufshoro Bunds, right bank.		3,840	23,630
		Total, Works for which only Revenue Accounts are kept.		...	1,38,115
		WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.			
1	Begári Canal ...	Constructing loop to Kashmor Bund.	To prevent breaches and provide protection for cultivation.	308	308
2	Shikárpur Canal ...	Constructing a retired portion ...		39,052	
3	Do. ...	Constructing a new loop ...		15,781	45,833
4	Ghár Canal ...	Constructing a proposed loop to Phulu Bund.	To regulate supply	689	
5	Do. ...	Strengthening Jháli Bund ...		34	
6	Do. ...	Do. Ghár Bund ...		1,615	
7	Do. ...	Constructing a sluice over Sidwah.		870	3,211
		Total, Works for which neither Capital nor Revenue Accounts are kept		...	49,352

27. The regular establishment charges of the department for the year under review and for the preceding one are shown in the following statement :—
STATEMENT—G 4.

Districts.	CAPITAL EXPENDITURE.									
	1890-91.					1891-92.				
	Outlay.	Establishment Charges.				Outlay.	Establishment Charges.			
		Executive.	Percent- age.	Direction.	Percent- age.		Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals	...	...	...	...	...	3,232	485	15	162	5
Shikarpur Canals	...	...	...	...	...	...	...	...	...	...
Ghar Canals	...	...	...	...	...	...	...	...	...	...
Western Nara	...	...	...	...	...	...	...	...	...	...
Eastern Nara	63,661	11,759	18.5	2,939	4.6	67,467	13,493	20	3,373	5
Hyderabad Canals	...	...	...	...	...	...	...	...	...	...
Fulehi Canals	11,474	9,821	15	374	5	86,102	3,363	14.9	1,788	4.9
Karachi Canals	...	...	...	...	...	...	...	...	...	...
Total ...	81,135	14,580	...	3,813	...	1,06,801	19,341	...	5,323	...

Districts.	REVENUE AND AGRICULTURAL EXPENDITURE.									
	1890-91.					1891-92.				
	Outlay.	Establishment Charges.				Outlay.	Establishment Charges.			
		Executive.	Percent- age.	Direction.	Percent- age.		Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals	1,82,616	43,973	24	8,692	4.8	1,57,544	45,321	28.8	7,390	4.6
Shikarpur Canals	...	...	...	...	...	1,37,740	22,741	16.5	6,643	4.8
Ghar Canals	27,335	20,890	23.9	4,114	4.7	1,07,080	26,479	24.7	4,983	4.7
Western Nara	2,69,454	22,972	8.5	12,369	4.6	1,73,911	35,251	15.1	8,102	4.7
Eastern Nara	57,237	22,480	33.4	3,085	4.6	58,705	16,233	27.1	10,726	4.6
Hyderabad Canals	2,04,821	35,354	17.7	9,382	4.6	2,25,135	47,339	20.4	8,389	4.6
Fulehi Canals	1,96,026	27,591	13.9	9,063	4.6	1,81,080	30,439	16.8	6,547	4.6
Karachi Canals	1,67,016	50,909	30.5	7,653	4.6	2,05,851	43,464	31.2	...	...
Total ...	13,23,933	2,50,734	...	61,669	...	12,53,996	2,58,268	...	58,376	...

Details of Direction Charges.

	1890-91.	1891-92.
	Rs.	Rs.
Superintending Engineer in Sind...	29,941	29,346
Secretariat and Accounts ...	35,441	34,353
Total ...	65,382	63,699

The total charges under all heads are compared below :—

	1890-91.	1891-92.
	Rs.	Rs.
Executive	2,65,114	2,77,609
<i>Direction.</i>		
Superintending Engineer's office in Sind	29,941	29,346
Secretariat and Accounts ...	35,441	34,353
Total ...	3,30,496	3,41,308
Increase ...	Rs. 10,812	

The increase of Rs. 10,812 is made up as under :—

	Rs.
Increase in Executive Establishment ...	12,495
Decrease in—	Rs.
Superintending Engineer's Establishment	595
Direction and Accounts ...	1,088
	1,683
	Rs. 10,812

The increase in executive establishment in 1891-92 was actually Rs. 14,828 made up of several small excesses in charges for Engineering, Lower Subordinates and Revenue Establishments and pay and allowances of officers and establishment deputed to serve on the Sind Irrigation Committee under Government Resolution No. 2139 of 23rd December 1891; but it was reduced to Rs. 12,495 by an excess debit of Rs. 2,333 over that of previous year, to the buildings and roads branch for works carried out by Irrigation Branch for the general branch. The decrease in the charges of the Superintending Engineer's office is small and requires no special remarks. The increase in Secretariat and Accounts is due to less expenditure on irrigation works in 1891-92 than in previous year.

28. The following statement shows the percentage of expenditure on revenue and the cost of maintenance per acre :—

STATEMENT H (*vide* TABLES III A AND IV).

Years.	Cultivation.	Total Canal revenue assessed, including Miscellaneous	EXPENDITURE.			Percentage of revenue.	Cost of Maintenance per Acre.
			Maintenance and Repairs.	Cost of Revenue collection.	Total.		
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86 ...	17,39,919	35,77,341	10,79,672	3,16,215	13,95,887	39.02	0.80
1886-87 ...	13,14,650	37,77,985	10,99,852	3,29,394	14,29,246	37.83	0.80
1887-88 ...	13,71,114	38,78,084	13,02,617	3,42,170	16,44,787	42.4	0.88
1888-89 ...	21,18,535	44,69,436	11,81,720	3,91,630	15,73,350	35.2	0.74
1889-90 ...	23,49,819	47,91,745	12,14,558	4,23,904	16,38,462	34.19	0.69
1890-91 ...	22,03,473	47,04,310	12,22,074	4,22,001	16,44,075	34.33	0.75
Average ...	20,16,268	41,99,717	11,83,415	3,70,866	15,54,301	37.01	0.77
1891-92 ...	21,65,631	46,83,888	12,45,340	4,24,558	16,69,898	36.65	0.77

The percentage of expenditure on revenue is slightly more than the previous year's but considerably below the average. The cost of maintenance per acre is 0.77, being a trifle more than the preceding year, but same as the average.

29. In the following statement are shown the financial results (actuals) of the irrigation works in the province, including works for which neither capital nor revenue accounts are kept :—

STATEMENT I (*vide* GENERAL ABSTRACT OF FINANCIAL RESULTS).

Class of Works.	Gross Revenue.	Working Expenses.	Net Revenue.	Simple Interest.	Net Profit.	Deduct average Revenue before improvement.	Due to Capital outlay.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Major works—Productive works.	7,66,137	3,44,564	4,21,573	3,33,985	87,588	28,500	59,288
Minor works,—Irrigation and Navigation, for which Capital and Revenue Accounts are kept.	17,31,141	5,49,107	11,82,034	...	11,82,034	3,74,707	8,07,327
Minor works, Irrigation and Navigation, for which only Revenue Accounts are kept ...	21,73,558	9,74,554	11,99,004	...	11,99,004	...	11,99,004
1891-92 total ...	(a) 46,70,836	18,68,225	28,02,611	3,33,985	24,68,626	4,03,007	20,65,619
1890-91 total ...	(b) 46,90,094	18,54,093	28,36,001	3,30,616	25,05,385	4,03,007	21,02,378
	—19,258	+ 14,132	—33,390	+ 3,369	—36,759	...	—36,759

Note.—In the general abstract of Financial results the Examiner has credited to Karachi Canals a sum of Rs. 2 realized in that district on account of Gaja ex-Fuleli falling into it. This correctly belongs to Fuleli Canal (Capital) and has been credited accordingly in this and other tables.

	Rs.	
Add ...	(a) 46,70,836	
	7,029	
Agricultural Works ...	40,77,875	Vide Table VI A.
	(b) 46,90,094	
Add—Agricultural ...	9,158	
Receipts ...	46,99,761	Vide Table VI A.

The net profit on Major works is considerably less than in the previous year, chiefly owing to the unfavourable working of the Desert Canal. The returns contributed by the Minor works show a great improvement on those of 1890-91.

30. The following statement shows the financial results of the four Major and seven Minor works (Capital) in Sind:—

STATEMENT I—1.

Canals.	GROSS REVENUE.					WORKING EXPENSES.				Net Revenue.	Deduct average before improvement.	Balance of net Revenue due to Capital Expenditure.	Percentage of net Revenue on Capital outlay.
	Capital Outlay to end of 1891-92.	Irrigation.		Plantations and Miscellaneous refunds.	Total.	Direct.	Indirect.	Total.					
		Government Land.	Fishir Lands in Sind and Lands in Khesht.										
1	2	3	4	5	6	7	8	9	10	11	12	13	
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
Productive Works.													
Desert Canal ...	12,61,481	16,000	9,362	365	25,524	1,13,066	3,994	1,17,060	-91,906		-91,906		
Unharwah ...	3,30,128	15,518		23	15,541	8,213	237	8,500	-6,041		-6,041		
Begri Canals ...	16,73,079	2,71,969	14,123	225	2,96,313	87,693	2,305	90,000	1,96,313	24,850	1,71,467	10.25	
Eastern Nara ...	54,6,555	4,18,018	2,913	17,527	4,35,429	1,25,380	2,654	1,28,034	3,10,425	3,144	3,06,991	5.68	
Total ...	86,50,233	7,21,585	20,412	18,140	7,60,137	3,35,354	9,301	3,44,561	4,21,673	28,300	-3,95,773	4.53	
MINOR WORKS, IRRIGATION AND NAVIGATION, FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.													
Sukkur Canal ...	18,88,712	2,18,788	1,364	1,748	2,21,900	42,611	900	43,511	1,78,350	71,557	1,06,899	7.69	
Ghar Canal ...	4,40,977	7,18,464	2,440	7,779	7,28,673	1,54,700	3,180	1,57,889	5,68,784	1,16,832	4,51,952	102.49	
Mehrabwah ...	67,960	24,266	1	160	21,327	12,890	265	13,074	11,553	...	11,553	16.73	
Alibhac Kacheri ...	23,917	12,675	709	45	17,429	7,800	177	7,989	9,483	5,427	1,016	4.25	
Manak ...	2,01,532	86,095	2,461	328	92,467	46,894	1,034	47,928	51,536	38,468	13,068	7.46	
Sarfarwah ...	1,24	35,162	1,948	175	40,285	24,370	543	24,913	15,372	11,153	4,217	3.3	
Puleli ...	11,24	5,68,646	25,842	6,472	6,00,960	2,47,588	6,228	2,53,776	5,47,184	1,30,284	2,16,900	18.91	
Total Minor Works ...	26,79,636	34,768	16,717	17,31,141	5,85,780	12,327	5,40,101	11,82,034	3,74,707	8,07,327	23,78		
Total of both ...	1,30,75,040	24,01,741	61,180	34,857	24,97,278	8,72,134	21,537	8,93,671	16,03,607	4,03,007	12,00,600	9.94	
Total for 1890-91 ...	1,19,39,280	25,23,175	93,250	30,517	26,56,042	8,59,359	19,615	8,48,874	18,08,068	4,03,007	14,05,061	11.78	

* Including Rs. 9 on account of Gajra ex Puleli realized in Karachi Collectorate which the Examiner by mistake credited to Revenue Works in Karachi Canals District.

Note.—The figures in column 3 include 4 per cent. receipts from sale of occupancy rights.

The Desert Canal shows a large deficit. The Unharwah gave a very small profit compared with last year, but returns from the Begari are better. The Nara returns have slightly fallen off. Under head "Minor Works" the Sukkur, Ghar and Mehrabwah give better results than in the previous year, while the four remaining canals show a falling off. The construction estimate of the Desert Canal was closed at the end of the year under report.

31. The following statement shows the area irrigated by Major and Minor works (Capital) in Sind compared with what the original projects were intended to irrigate:—

STATEMENT J (vide TABLE III).

Canal.	Area irrigable by complete project.	Area irrigated during		Excess area irrigated, columns 2 and 4.
		1890-91.	1891-92.	
Major Works.	Acres.	Acres.	Acres.	Acres.
Desert Canal ...	109,500	124,919	60,130	-49,370
Unharwah ...	18,000	20,690	19,283	+1,283
Begari Canals ...	104,000	144,053	174,719	+70,719
Eastern Nara ...	212,631	228,292	211,951	-680
Total ...	444,131	517,954	466,083	+21,952

STATEMENT J (*vide* TABLE III)—*continued*.

Canal.	Area irrigable by complete project.	Area irrigated during		Excess area irrigated, columns 2 and 4.
		1890-91.	1891-92.	
<i>Minor Works—Capital.</i>	Acres.	Acres.	Acres.	Acres.
Sukkur Canal ...	About 600,000	87,199	89,343	+ 1,59,071
Ghár Canal ...		2,53,114	2,39,369	
Fuleli ...		3,32,765	3,24,935	
Mehrábwah ...		13,225	13,367	
Alibhar Kacheri ...		9,325	10,822	
Marak ...		49,421	54,111	
Saríraz ...		27,814	27,124	
Total ...	600,000	7,72,863	7,59,071	+ 1,59,071

Although there has been a considerable falling off in the area irrigated by the Desert Canal, from causes already explained, the net result of the four Major canals shows an increase of 21,952 acres as compared with the irrigable area. Under neither head are the figures in this statement satisfactory. With the exception of the Begári, the area cultivated compares unfavourably with that of 1890-91 on almost every canal.

32. In every year there is a small alteration in the lengths of canals and river-embankments in Sind. In the former it is owing to revision, removal of bed-curves, cutting of new heads and more accurate measurements, and in the latter owing to construction of loop bunds. During the year under report the length of canals was shortened by 76 miles, chiefly on account of corrections in measurement. The length of embankments shows a net increase of 6 miles, owing to completion of Bhati Bund in Eastern Nára District. The bunds in this district are not along the river, but along the Eastern Nára, whose water they confine. They should not be included in this statement, which gives the length of canals and embankments in each district:—

District.	LENGTH IN MILES OF			
	Canals.			River Embankments.
	Main Canals.	Branches.	Total.	
Begári Canal ...	185	248	433	48
Shikárpur Canal ...	272	54	326	34
Ghár Canal ...	120	308	428	43
Western Nára ...	276	240	516	79
Eastern Nára ...	175	103	278	241
Hyderabad Canal ...	492	1,138	1,630	1
Fuleli Canal ...	172	973	1,145	12
Karáchi Canal ...	1,112	*...	1,112	151
Total ...	2,804	3,064	5,868	659

* Details for Karáchi Canal District not yet received.

33. The crop return is given in the same form as last year for Government land, but the form of the abstract has been changed to give more information. An additional return including crops on all lands is added.

The following statement shows the area of the principal crops irrigated on Government land during 1891-92 :—

Class of Crops.	NAME OF CANAL DISTRICT.									Total.
	Begári District.	Shikárpur District.	Ghár District.	Western Nára District.	Eastern Nára District.	Hyderabad District.	Fuleli District.	Karáchi Canals.		
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
Kharif	Rice	6,408	32,064	1,59,436	64,394	60,468	2,098	1,37,554	1,38,160	6,20,492
	Jowári	81,470	44,130	52,307	90,551	900	89,431	6,194	2,354	3,67,947
	Báji	16,450	1,400	1,740	4,080	32,350	1,51,010	78,367	22,339	8,05,550
	Cotton	764	1,110	733	700	22,458	42,224	14,028	58	92,096
	Other crops	43,962	5,164	14,064	3,150	6,660	45,235	12,153	6,928	1,37,348
Total Kharif	1,49,084	83,868	2,28,970	1,62,875	1,42,837	3,29,912	2,46,204	1,70,459	15,13,338	
Rabi	Wheat	21,613	47,011	17,558	56,710	88,541	21,180	12,417	2,639	2,71,670
	Barley	442	259	664	2,348	519	506	3,214	7,436	15,541
	Oilseeds	40,418	1,288	15,521	17,728	18,475	5,189	20,089	3,467	1,30,550
	Other crops	10,118	3,171	7,692	6,847	5,583	5,762	7,917	5,618	53,596
Total Rabi	72,589	51,709	95,738	83,723	62,118	22,630	43,637	19,210	4,61,857	
Total, Kharif and Rabi	2,21,673	1,35,577	3,24,098	2,46,603	2,04,955	3,52,542	2,89,841	1,89,669	*19,74,896	

	Kharif.			Rabi.			Total.			Kharif.			Rabi.			Total.			Kharif.			Rabi.			Total.		
	Per.	Cent.		Per.	Cent.		Per.	Cent.		Per.	Cent.		Per.	Cent.		Per.	Cent.		Per.	Cent.		Per.	Cent.				
Percentage of Kharif and Rabi	67	33	100	62	38	100	70	30	100	66	34	100	70	30	100	91	9	100	88	12	100	90	10	100	77	23	100
Percentage of Flow and Lift.	89	11	100	84	16	100	94	6	100	75	25	100	76	24	100	14	86	100	67	33	100	84	16	100	69	31	100

Note—The detail of lift and flow is shown in the abstract of crop returns.

Deduct Dubai cultivation as per Table VII ...
 * 19,74,890
 25,179
 19,49,717

The kharif is the chief crop grown in Sind, being 77 per cent. of the whole. In the Fuleli, Eastern Nára and Ghár Districts rice is the staple crop, while jowári and báji are chiefly grown in Begári, Hyderabad, Shikárpur, Western Nára and Karáchi, but there is also a large area of rice in the three latter districts. The cotton crop is produced almost entirely in Hyderabad and Eastern Nára, with a fair area in the Fuleli. The Ghár, Western Nára, Eastern Nára and Begári, are the principal rabi districts, and of these the largest crop is grown in the Ghár. The chief rabi crop is wheat, but there is a large area under oil seeds.

There is a general decrease in the area of all kharif crops, and of 19,578 acres in rice. The cotton crop shows a small falling off from that of 1890-91, but compares favourably with that of all other years.

The most remarkable feature of this return is the large increase in the wheat crop in almost all districts, amounting to 89,103 acres for the province. In the five northern districts the proportion of kharif to rabi is about 2 to 1, while in Hyderabad, Fuleli and Karáchi it is nearer 9 to 1. In the Hyderabad District there is very little flow which largely predominates in all the other districts.

34. Table I—E, which in this report takes the place of the old Table VIII, gives the discharge and duty of some of the more important canals.

The duty is a little better than last year's in most of the canals, the Begári, Mehrab and Fuleli show a considerable improvement and in the others the average is fairly maintained. No observations for discharge for rabi have hitherto been taken, but for the future the rabi discharge of the Sukkur, Mithrao and Thár Canals will be recorded. These are the only canals which have a separate rabi supply; on all others the rabi crop is grown on a watering at the end of the kharif season sufficient to saturate the ground; and the "dubari" or double crop is grown on moisture remaining in the soil after the kharif crop, generally rice, has been reaped.

35. Table II—E, now given for the first time, shows the incidence of working expenses and assessed revenue on canals.

The irrigation share of net consolidated revenue has been taken as "occupiers and owners' rate or indirect revenue, and hakaba on Jágíhír and foreign cultivation as direct.

The gross assessment includes miscellaneous receipts; columns 16 and 17 have not been filled in, as the cultivation on which direct rates are levied, is separate and different from that which gives indirect assessment.

36. Table III—E shows the area and approximate value of each kind of crop irrigated in Sind during 1891-92. This is the first time this table has been prepared. Accurate information as to the value of crop is not available, and the figures given in this table are based on the estimates of outturn made by taluka officials, and are only approximate. The form of the table had to be altered, as the estimates of outturn are made for revenue districts and not for canals.

37. During the year under report the Division was in charge of Mr. H. M. Thompson and the eight irrigational districts were held by the following officers:—

Mr. D. W. Herbert—Begári Canals.
Mr. P. P. Chandanani—Shikárpur Canals.
Mr. H. J. Landon—Ghár Canals.
Mr. R. R. Menneer—Western Nára Canals.
Mr. T. W. de Winton—Eastern Nára Canals.
Mr. R. B. Joyner—Hyderabad Canals.
Mr. T. Summers—Fuleli Canals.
Mr. John Tate—Karáchi Canals.

EXECUTIVE DISTRICTS.

BEGÁRI CANALS DISTRICT.

1. This district is watered by three large canals,—the Desert the Unharwáh and the Begári,—and it is completely protected from the river by the Kashmore Bund. There are 433 miles of canals, of which 248 are branches of the main feeders, which make up the remaining 185. The river embankment is 48 miles long.

2. *Kashmore Bund*.—Abkalani establishment of the usual strength was provided, but only half of the full number of beldárs were appointed on the 1st of June, the other half were put on 10 days later, and the whole were discharged by the end of August,—on the 1st fall of the river. The water-level in front of the bund was unusually low, and a considerable area of unprotected land was not saturated sufficiently to allow of the usual wheat crop being sown on it. There were no leaks. A few earthen spurs were run out at right angles to the bund in places where it was threatened by scour from the flow down the barrow pits in front.

3. *Desert Canal*.—This canal was most unfortunate; its supply practically failed early in the season, and locusts destroyed all crops that had been sown. Full-supply level was never reached, and the average was less than half the ordinary supply of previous years, the area irrigated being reduced in about the same proportion. The canal was opened on 15th May,—some days earlier than usual,—with 6'1 feet of water available and every prospect of a good season. Early in June it was noticed that silt was rapidly being deposited, and by the 20th the first five miles of the canal were choked by a layer of silt and sand, averaging 4' 6" in depth. This disastrous condition was brought about by the sudden set of the river on a large sand-bank just above the mouth of the Dhand, from which the Desert Canal was fed. The sand and silt were swept through the mouth of the Dhand, which they quickly destroyed, into the canal. Towards the close of the season the up-stream mouth of the Dhand having failed, the canal was fed, though with a considerable loss of head, from the lower end; a good deal of the deposit in the mouth was carried on by the comparatively clear water, but it was too late. What little cultivation there was on this canal was completely destroyed by locusts, and if there had been a full crop it is more than probable that little, if any of it, would have escaped.

4. *Begári Canal*.—This important canal worked well notwithstanding the low inundation. It was opened on 15th May, or 10 days earlier than usual, after Rs. 40,000 odd had been spent in regrading and restoring the first 19 miles.

This work has answered well, water flowing until the middle of January, and no clearance being since required. There has always been a difficulty in getting the cultivators about the 70th mile to commence their operations in time, and this year they were unusually late through fear of locusts. The result is that breaches occur; and valuable water is wasted, which is not again available when cultivation is in full swing higher up. Early in September the Indus cut into the Wadhu Dhand, about a mile south of where the Begári takes off from it; the effect of this was on the whole beneficial. The Nurwáh branch worked unusually well, but the water was all used before it reached the Khelát lands at the tail. The supply of the Eden and Sir Canals, into which the Begári flows, was poor; but the late flow enabled a large area of rabi to be sown. On the whole canal there was an increase of about 30,000 acres of cultivation over the previous years.

5. *Unharwáh.*—The supply in this canal was pretty much the same as in previous years, but it flowed 10 days earlier and remained open till the 13th October, giving water for some 5,000 acres of rabi.

6. *General.*—This district fared badly during the inundation of 1891, owing to the failure of the Desert Canal, and the enormous flights of locusts which settled on and devoured every green thing they could find. In many instances crops were sown two or three times, only to be again destroyed, and no fodder of any kind was left for the cattle, so that men and beasts had to leave the country. Land on the Desert and Unharwáh Canals suffered most, as on the Begári there is a large area of rice, which appears to be the only crop locusts do not care for. The remissions granted on account of this scourge amount to considerably over one lakh of rupees. The rainfall was less than usual, and occurring in July was of little use.

7. The following statement shows the revenue collections and the charges for the year under review and four previous years:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	4,54,999	1,96,853	2,52,249	43·27	55·44
1888-89 ...	6,34,190	2,12,066	2,15,997	33·44	34·05
1889-90 ...	5,67,007	2,12,959	3,52,634	37·55	62·19
1890-91 ...	4,88,752	1,62,279	2,75,863	33·22	56·64
1891-92 ...	3,34,127	1,59,820	2,45,543	47·83	73·49

The revenue collected is considerably less than in the preceding and other years of the series, due to falling off in cultivation on the Desert Canal.

The charges are less than in the preceding year, but the percentage is high, owing to fall in revenue.

SHIKÁRPUR CANALS DISTRICT.

1. This district is divided by the river, Rohri being on the left, Shikárpur and Sukkur on the right bank. The right bank is completely protected by the Sukkur Begári Bund, 34 miles long, while the left bank is open for 46 miles, only the 11 miles north of Rohri being closed by the Kasimpur Bund. There are thus 45 miles of river embanked; but in addition there are 39 miles of inland bunds kept up to protect cultivation on some canals from local floods. The only large canal is the Sind, 43 miles long, watering, with 47 miles of branch, portions of the Sukkur and Shikárpur talukas. In Rohri on the left bank there are 229 miles of main canals, with only one bund 7 miles long.

2. *Sukkur Begári Bund*.—This bund, extending from the Begári to Sukkur, remained staunch throughout the inundation, there being no breaches or leaks, and less water than usual against it. Owing to the continued erosion of the river opposite the 32nd and 10th miles, loop bunds were made and completed before the inundation at these places, costing Rs. 45,832. Opposite the 10th mile the original bund was cut away in July, and flood was checked by the new loop, which stood well although quite fresh. At the 32nd mile the old bund still remains, but is in danger. Other portions of the bund were strengthened before the inundation by increasing the front slope.

3. *Sindwáh*.—This canal, as has been the case for some years, worked very well, giving a good supply till it had to be closed for repairs in November.

4. *Rohri Canals*.—These had all been well cleared and repaired, having been greatly damaged by the floods of previous year. They were not, however, of much use, as the cultivators would not use the water early in the season, expecting the floods on which they had cultivated for two years. Consequently the canals breached in all directions, thus, in a measure making up for the absence of flood water. The rabi crop grown on land watered from these breaches was greatly helped by the late rise of the river in September.

5. *Floods*.—For two years the whole of Rohri had been swept by floods, of which five left the river in the district and the largest came from Baháwalpur. This season there was only one small flood from near the mouth of the Koraiwáh, and the greater part of it found its way back into the river in front of the Kasimpur Bund.

6. *General*.—For this district the inundation was a fair one. It escaped the ravages of locusts, which did so much damage just north of it, and the returns would have been more favourable had the Rohri cultivators taken the water from the canals before it was too late. The water duty on the Sind Canal was lower than usual, owing to the lateness of the inundation which favours rabi crops not included in the calculations. There was no rain.

7. The following statement shows the collections and charges for the year and for four preceding ones:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	3,28,080	1,86,771	2,38,852	53·06	72·80
1888-89	3,60,798	1,16,525	1,36,486	32·30	37·82
1889-90	3,61,663	1,23,635	1,53,957	41·37	42·56
1890-91	3,49,135	1,13,222	1,46,458	37·62	41·95
1891-92	3,96,945	1,47,450	2,06,713	37·15	52·08

The collections for the year were Rs. 47,810 more than in the previous year and the best of the series, but the charges were more owing to expenditure on the Sukkur Begári Bund, thus raising the percentage to 52·03.

GHÁR CANALS DISTRICT.

1. This district is watered by the Sukkur and Ghár Canals. The former is 74 miles long with 58 miles of branch canals, while the latter, 46 miles long, has 250 miles of branches. The correct mileage of canals in this district is therefore 428 and not 508 as shown in previous reports; the alteration is due to corrections in measurements and classification and the omission of a private canal. The whole district is protected from river floods by the Ghár Bund, 43 miles long, and by 13 miles of high bank where no bund is yet required.

2. *Ghâr Bund*.—The water against this important embankment was less than usual, averaging from 8' to 1' 10" only. There were no breaches and only one small leak, round a sluice, which was quickly closed. The bund is strong and in good repair.

3. *Sukkur Canal*.—This canal is fed by two mouths,—the old or Sukkur Head, which takes off from the top of the Sukkur pass, and is intended for cold weather or rabi supply only, and the Rahuja Head, which takes from a Dhand, three miles higher up and gives water for kharif. The Rahuja Head was opened on the 13th June, and at first the supply was sufficient, but the cultivators were not ready; unfortunately when water was wanted full supply could not be given, and late in the season it was necessary to open the old head to bring the crops to maturity. This operation is attended by some risk, as any serious deposit in the old mouth would affect the rabi supply; but fortunately there was no silting and the mouth worked well when opened for rabi in November.

4. *Ghar Canal*.—This canal was opened on 2nd June; but, as was the case in the Sukkur Canal, water was not used till the end of the month, when full supply was maintained by opening the Fordwah. All the branches of this canal had been thoroughly cleared, and, except in the tails of the Chilo and Nasirwahs, the supply was very good considering the inundation.

5. *General*.—There were no floods and very little rain. The canals were unfortunate in that, when the river gave the best supply early in the season, the cultivators, who were still busily engaged in harvesting the abundant rabi crop of last year, were not able to take advantage of it, and when they wanted water the river failed. The effect of this, and of the low and late inundation, is evident in decrease of cultivation, but the crops grown paid better rates and gave an increased revenue. The average discharge of the Ghâr was greatly in excess of previous years, amounting to 6,672 cubic feet per second, owing to the favorable position of the river and thorough clearance of Fordwah feeder. It was not, however, fully utilised as explained above, and for this reason and owing to the continued increase of rice cultivation, the duty was considerably less than usual.

6. The receipts in this district and charges against maintenance for the year and four preceding ones are shown in the statement below:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue Collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	6,34,863	1,82,533	2,04,311	28.75	32.18
1888-89	7,88,065	1,82,135	2,65,146	23.12	33.65
1889-90	8,61,021	1,64,196	1,79,235	18.60	20.82
1890-91	9,22,526	2,22,778	2,59,385	24.15	26.12
1891-92	9,48,696	2,09,783	2,18,217	22.11	25.00

In this district also the collections were better than all previous years and more than the preceding one by Rs. 26,170. The charges on the other hand were less than in the previous year, which reduces the percentage of cost on revenue to 23.00.

WESTERN NÁRA DISTRICT.

1. This district is watered by the Western Nára and a few small canals, which take off direct from the Indus. It contains 516 miles of canals, of which 276 are main canals and 240 branches. The Nára itself is 146 miles long and has 235 miles of branches. The Nára Bund runs for 79 miles along the river bank, and there are 21 miles of the Sehwan and Dádú Tálukas unprotected. These

figures are not the same as those given in previous reports, but they are the result of more accurate information.

2. *Western Nára*.—This canal worked remarkably well owing to favourable action of the river on its mouth. It gave a good supply throughout the season, and flowed throughout the year with the exception of a few days in December. The Pritchard Canal suffered greatly from continued erosion by the river of its mouth, by which 3,700 feet were cut away, and a deposit of silt, in places reaching 8 feet deep, left in the canal. Under these circumstances it was not of much use as a feeder to the Nára, but what water it brought in, was beneficial. All branch canals, particularly those near the mouth, worked well, and gave a fair supply.

3. *Muncher Lake*.—As there was no rain and no change for the better in the Aral, the lake did not fill or empty satisfactorily. To assist the Aral, a flood which left the river north of Sehwan was admitted into it, and for a time added considerably to its discharge; it was also of some use in removing silt.

4. *Nará Bund*.—In some places this bund was threatened by the river, and a small loop had to be made near Lushari. The water was low and gave no trouble; there were no breaches and only a few leaks.

5. *General*.—If it had not been for the exceptionally favorable condition of the mouth of the Nára this district would have felt severely the low and short inundation. Only the lowest of the "Katchas" in front of the Nára Bund were flooded, and the area of wheat usually grown here, will be greatly reduced. Some remissions were given in the Karachi Collectorate on account of damage done by insects. The returns of cultivation are good, and the increase in rabi is due to the late inundation and high price of wheat. There was little rain and no floods.

6. The following statement shows collections and charges for the year and four preceding ones:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	5,96,120	1,76,876	1,81,804	29·67	30·49
1888-89	6,01,676	1,51,317	1,77,728	25·14	29·54
1889-90	6,60,292	1,74,452	3,23,366	26·42	48·97
1890-91	6,07,244	1,56,657	3,66,798	25·79	60·40
1891-92	6,92,021	1,51,147	2,77,715	21·84	40·13

Here again the collections were the best in the series, exceeding those of the previous year by Rs. 84,777, which is very satisfactory.

The charges too show favourably, in that they are less than in the previous year by Rs. 89,080 thus reducing the percentage of cost to 40·13 against 60·40 of the previous year.

EASTERN NÁRA DISTRICT.

1. The Eastern Nára draws its supply from the river through the Nára Supply Channel just above the town of Rohri. There are 278 miles of canals in the district, and the cultivation on the Mithrao and Thar canals is protected by bunds 93 and 33 miles long respectively. There are also 115 miles of bunds on the banks of the Nára to retain its water. Five miles have been added to the length of the Khipra Canal, and 13 to that of the Nára Bunds by the construction of the Bhaiti Bund.

2. *Eastern Nára*.—The supply channel regulator was opened on the 8th of May and gave a sufficient supply throughout the season. There were no floods, and the maximum reading on the 12th mile gauge was 21' 7". There were a few unimportant breaches north of the Thar Canal Head. The bed of the Nára, between Chandawahi and Napkot, which was thoroughly cleared in 1878, has again become choked with weeds and sand blown in by the wind and carried into the canal by the rain; consequently the surplus water could not find a free escape and did some damage by breaking out to the west.

3. *Mithrao Canal*.—Kharif supply was admitted on the 11th May and was ample throughout the season. In two of the branches, where the velocity cannot be increased, some difficulty was experienced from weeds, which by their rapid growth reduced the supply for a time. This canal has been for some years enlarging itself, and it has now become necessary to move back the original spoil banks.

4. *Thar Canal*.—This canal had not been closed for repairs as usual, therefore the supply was somewhat deficient owing to accumulation of sand and weeds. It was necessary to leave the canal open to draw off water from the site of the Bhaiti Bund, which was under construction.

5. *General*.—The new regulator at the head of the Jamrao Sang was completed before the inundation, but as there were no floods or surplus water it was not opened. On the whole the season was favourable; there were no floods little rain and the principal canals worked well. In the smaller branches there was the usual difficulty from weeds. The excavation of the Nára between Jatri and Ketí was commenced, and it is believed when this work is completed weeds will gradually disappear in the Khipra, Tharwah and lower reaches of the Nára. The season was dry at times but did little damage.

The results in this district and charges against revenue are shown in the following statement:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	3,31,680	87,063	87,063	23.23	23.23
1888-89	4,05,787	1,23,600	1,23,600	30.46	30.46
1889-90	4,98,950	1,29,132	1,31,557	25.88	26.36
1890-91	4,59,233	1,29,617	1,38,572	28.23	30.18
1891-92	4,38,459	1,22,660	1,28,034	27.98	29.20

The collections have fallen off by Rs. 11,774 compared with those of previous year, but the total charges being less than the previous year by Rs. 10,538 the percentage is reduced to Rs. 29.20.

HYDERABAD CANALS DISTRICT.

1. This is the largest canal district in Sind; it contains 492 miles of main canals, having 1,138 miles of branches making 1,630 miles of irrigating channels. There are no river embankments as the country is high and not subject to floods. The principal canals are the Naolaki, Dad, Ren, Great Marak, Kari Shumali, (Galu) Nasir and Sarfraz. The land is high, and water is lifted from the canals by the Persian wheel.

2. *Naolaki*.—This canal has two mouths, both of which worked well and the supply, except in two small branches near the tail, was good throughout the season.

3. *Dad*.—The river approached close on to the mouth of this fine canal, and having destroyed the old town of Mithani and threatened to force a passage down the canal left again, taking a new course some miles to the west. Owing

to this action of the river the supply in this large system was excellent, and notwithstanding the unusually low river, the water-level in this canal was the highest ever recorded, and land was irrigated by "flow," which had never been cultivated except by "lift." The canal has a high velocity and silt is carried into the branches, which they are not able to carry on.

4. *Ren.*—The improvements to this canal were completed before the inundation. Their object was chiefly to enable the main canal to bring down more water to the branches, which are all at its tail. The supply was better than usual, but the full benefit to the work was not felt owing to complications connected with the Dhand, from which the Ren draws its supply.

5. *Great Marak.*—Heavy clearance in the upper portion of this canal enabled a fair supply to be maintained, and although the river was unfavourable at the mouth, there was an increase of some 5,000 acres of cultivation on this system.

6. *Kari Shumali.*—The Ghalu, the principal canal in this system, had a fair supply, but that of the other canals was poor. The river is unsettled just here at present, and its frequent fluctuation during the inundation had a bad effect on these canals, which are long and crooked, with low gradient. The same remarks apply to the Nasir.

7. *Sarfráz.*—This is a long canal with only a few branches near the tail. The supply was fair, and was favourably affected by the construction of a bund to keep water from forests out of the canal.

8. *General.*—The canals in this district, with two or three exceptions, have very low velocity and are peculiarly susceptible to fluctuations in the level of the river. A fall of even short duration brings a serious decrease in the water supply. It would have given a poor and reduced crop had it not been for the attention paid to the execution and distribution of the clearance, which was than usual. As it was, many of the canals were unable to take advantage of the rise which occurred late; but on the whole the general irrigation of the district was most satisfactory in a peculiarly unfavourable inundation.

9. The following statement shows the collections and charges against revenue for the year and four preceding ones :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage on total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	6,40,454	2,37,242	2,37,288	37-04	37-05
1888-89	6,93,687	3,24,064	3,36,922	46-72	48-57
1889-90	7,50,917	2,91,483	3,52,147	38-82	46-89
1890-91	7,76,424	3,02,707	3,22,522	38-99	40-15
1891-92	7,78,643	3,42,616	3,65,224	44-00	46-91

The increase in collection over previous year though small, *viz.* Rs. 2,219, is nevertheless satisfactory, but the increase of charges, Rs. 42,702, raises the percentage to 46-91 against 40-15 of the previous year.

FULELI CANALS DISTRICT.

1. This district is watered almost entirely by the Fuleli Canal and its branches 98 and 901 miles long, respectively. There are a few small canals taking direct from the Indus; their corrected length is 74 miles, and they have branches aggregating 72 miles. Only a small portion of the district is subject to floods, which are shut out by an embankment 12 miles long.

2 *Fuleli*.—Water was admitted on 1st May, and for some time the supply had to be regulated. Throughout June and July more water would have been useful; but in the end of August the head regulator had again to be partly closed. The supply was fairly good. Roughly speaking, the land on the first half of the Fuleli is high and on the latter half low, and occasionally when the river is high or water not being fully used, the up land has to be sacrificed to save the low land from flooding; this will not occur when the regulator, now being constructed at the 6th mile, is completed. The old mouth of this canal was opened on 1st June, and the temporary weir, which for the third time was put up at its 11th mile, was again washed away; this has now been replaced by a permanent sluice to the great advantage of the Hyderabad Taluka, which is watered by this mouth.

3. *General*.—There were no leaks or breaches in the river embankment, and the old canals through it worked fairly well. The supply of the Wadhuwah, a small canal which had its head below the regulator, was greatly improved by a new mouth from the up stream side. Some bad curves in the Gaja were removed, and the Sani-Guri escape completed. There was no rain, and owing to this and the regulation of the main channel, breaches in the tail canals were fewer than usual. This district is not much affected by any but extraordinary differences in the character of the inundation.

4. All canals were cleared as usual, and special attention was given to opening out the tails, and improving the gradient and section according to requirements.

5. The financial results and charges for the year under report and four previous years are given below:—

Year.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	5,54,389	2,76,408	2,76,408	49.86	49.86
1888-89	5,86,517	2,81,063	2,81,063	47.92	47.92
1889-90	6,45,166	2,95,778	3,02,749	46.00	46.92
1890-91	6,64,151	2,86,228	2,88,308	43.09	43.41
1891-92	6,50,729	2,63,357	2,78,008	40.47	42.72

The collections although better than the first three years of the series have fallen off by Rs. 13,422 in comparison with those of 1890-91. The charges, however, have decreased by Rs. 10,300.

KARA'CHI CANALS DISTRICT.

1. The mileage of canals in this district remains the same (1,112), but that of the embankment is increased to 154 by the extension of the Hilyah Bund. The river divides this district, and is embanked for 91 miles on the left and for 63 on the right bank. The embankment on the right ends at the commencement of the Delta, where the Indus divides into the Uchito and Haidari branches, but on the left it is carried on down to the mouth of the Mull. The principal canals are the Kalri and Baghiar on the right and the Pinyari on the left bank.

2. *Pinyari*.—This canal, which waters the greater part of the Mirpur, Batoro, Sijaval and Jati Talukas was opened on the 29th of April. In some places the rice seedlings suffered from the low river in June, but they recovered on the rise in July, and for the rest of the season the supply was ample and at times excessive.

3. *Kalri and Baghiar*.—These canals both worked well. In the Baghiar the supply was excessive and the want of continuous embankments was much felt. The new cut into the Kharira creek gave a good supply and cultivation on it is rapidly increasing.

4. *Embankments*.—The river embankments in this district were severely tried, but they had been well repaired before the inundation, and breaches were fewer and cultivation less damaged than in the previous year, although the water was higher. There were numerous leaks on both sides, but most of them were stopped by the Abkaláni establishment, and only five developed into serious breaches.

5. *General*.—Although the maximum reading at Kotri gauge was the same as in the previous year, the water level in this district was the highest on record. The early rise of the river enabled almost all canals to be opened earlier than usual, but the subsequent fall frightened the cultivators on many canals, reducing the supply when most wanted. Considerable damage was done on both banks by floods from breaches in the embankments, and on the right the spill from the Baghiar flooded a good deal of cultivation. The remissions are almost all due to this cause; but they are less than that of the previous year. The inundation was more favourable for this district than for any other in Sind. Canals were cleared as usual, but the expenditure on embankments was larger, as they had been greatly damaged by the inundation of 1890. The Hilaya Bund was extended north for three miles, and several new loops had to be made owing to continued erosion by the river.

6. The following statement shows collections in this district and charges against revenue for the year and four preceding ones:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES		Percentage on Maintenance and Revenue collections.	
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
1887-88	3,63,305	3,00,041	3,69,908	62.50	101.81
1888-89	3,88,229	1,82,560	2,05,417	47.03	53.68
1889-90	4,18,957	2,19,827	2,36,119	52.47	56.35
1890-91	4,32,294	2,52,487	2,70,525	58.41	62.58
1891-92	4,38,245	2,73,065	3,03,116	62.31	69.17

The revenue collected in 1891-92 was more than the previous year's by Rs. 5,951 and the best of the series. The charges, however, have risen and exceed the past year's by Rs. 32,591 raising the percentage of cost to 69.17 against 62.58.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

PUBLIC WORKS DEPARTMENT :
Office of the Superintending Engineer in Sind, }
Camp Sindhri, 31st December 1892.

TABLE I.

Cultivation and Water-share of Net Consolidated Revenue for 1891-92 and three previous years.

Canals and Executive Districts.	1888-89.		1889-90.		1890-91.		Average.		1891-92.		
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	
1	2	3	4	5	6	7	8	9	10	11	
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
MAJOR WORKS.											
PRODUCTIVE WORKS.											
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.											
Canals in Operation.											
Begari Canals ...	Desert Canal ...	69,175	1,34,214	82,777	1,48,221	81,068	1,46,916	77,873	1,39,784	81,777	17,203
	Umarwah ...	243,173	79,195	33,840	59,971	20,090	37,399	32,031	63,553	19,281	15,578
	Begari ...	163,284	3,10,119	141,533	2,76,101	118,293	2,33,411	141,012	2,72,577	146,423	2,72,739
		2,75,611	5,13,528	258,160	4,63,293	220,696	4,17,728	251,519	4,71,516	197,486	3,65,689
Eastern Nara ...	Nara Supply Channel ...	3,038	7,693	8,723	16,432	6,043	15,143	5,268	13,680	3,411	6,723
	Eastern Nara ...	38,707	52,003	86,094	1,04,001	80,091	67,788	58,164	75,930	29,842	49,243
	Mithran Canal ...	121,538	2,34,776	123,171	2,40,618	110,596	2,33,513	118,199	230,331	119,060	2,53,212
	Dinwah ...	3,149	5,510	9,827	16,629	7,372	13,322	6,688	11,827	7,459	12,338
	Beranwah ...	2,500	4,288	2,444	4,455	2,340	4,431	2,423	4,465	2,653	5,329
	Rhipra Canal ...	...	6,192	7,672	9,273	11,954	5,132	7,512	7,673	6,820	14,241
	Thar Canal ...	44,867	85,153	48,772	90,504	37,157	81,046	4,465	43,899	34,851	75,251
		213,709	3,89,214	291,663	4,84,688	2,3,372	4,24,255	200,239	3,92,993	204,935	4,17,517
	Total, Major Works ...	499,311	9,02,742	539,803	9,07,981	443,968	8,61,931	451,753	8,64,509	402,441	7,23,391
43.—MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.											
Ghar Canals ...	Sub ...	82,673	1,95,914	88,287	2,10,821	85,354	2,11,611	85,438	2,06,115	87,103	2,17,568
	Ghar Canal ...	204,388	5,56,181	227,555	6,42,941	232,966	7,09,434	221,646	6,42,886	232,277	7,09,245
		287,061	7,52,095	315,842	8,52,862	318,350	9,12,045	307,084	6,49,001	319,380	9,26,810
Hyderabad ...	Mehrabwah ...	14,160	26,078	14,893	25,548	13,010	24,047	13,971	25,218	13,168	24,274
	Alibhar Kachheri ...	5,935	12,371	8,898	18,186	8,066	16,396	7,407	15,854	7,250	16,465
	Marak ...	40,741	88,508	45,897	99,840	42,247	92,970	42,963	93,773	47,004	96,079
	Safrazwah ...	19,530	32,743	20,756	34,080	22,589	39,351	20,958	35,033	22,111	37,735
		80,332	1,59,705	90,361	1,78,563	85,902	1,72,760	85,629	1,70,843	91,623	1,74,583
Fuleli Canal ...	Fuleli ...	234,977	5,03,301	267,732	5,61,087	277,044	5,90,018	250,948	5,51,455	269,926	5,67,062
	Total, Minor Works Capital and Revenue Accounts ...	601,970	14,45,061	673,928	15,92,512	681,758	16,74,823	682,161	13,70,799	689,929	16,65,465
MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.											
Canals in Operation.											
Shikarpur Canals ...	Canals in Rohri ...	82,078	2,03,556	72,868	1,81,953	59,693	1,62,607	71,460	1,82,710	72,088	2,02,288
	Bunda in Rohri ...	55,065	1,51,586	63,615	1,71,210	61,738	1,76,366	60,146	1,66,387	63,436	1,63,081
	Bind Canal ...	...	...	...	...	...	...	...	...	...	...
		137,133	3,55,133	136,483	3,53,163	121,331	3,38,993	131,606	3,49,097	135,524	3,65,329
Western Nara ...	Nara ...	...	...	...	...	185,979	5,32,157	61,993	1,77,386	190,930	5,33,067
	Manchar ...	...	...	...	...	...	...	...	...	...	...
	Aral ...	...	...	...	...	...	...	...	...	...	...
	Pitchard ...	...	...	...	...	3,627	7,730	1,099	2,697	8,073	21,707
	Wair ...	...	...	...	...	8,186	15,946	2,062	5,993	6,994	17,307
	Mori ...	...	...	...	...	4,134	11,387	1,374	8,789	4,201	11,735
	Phita ...	...	...	...	...	6,991	15,753	2,330	5,251	5,333	18,744
	Dadu Canals ...	...	...	...	...	10,740	19,416	3,580	6,472	17,901	22,153
		...	...	...	...	270,657	6,01,769	72,352	2,00,590	246,603	6,66,716
Hyderabad Canals ...	Nasrat ...	22,638	53,592	25,671	59,506	23,464	55,396	23,824	55,911	24,500	58,414
	Naolukhi ...	61,038	1,19,091	62,753	1,16,927	48,502	1,08,104	60,771	1,13,261	49,382	1,10,149
	Dambro ...	7,419	16,412	9,508	20,206	10,739	22,869	9,231	19,832	11,718	24,607
	Dadwah ...	24,925	52,464	29,966	55,201	26,012	65,092	26,963	63,949	27,758	67,901
	Benwah ...	13,813	27,500	14,150	27,542	16,977	31,701	11,960	28,795	17,046	31,169
	Ghoro Mahmuda ...	48,938	97,091	55,202	1,12,173	57,466	1,18,744	53,867	1,09,735	55,925	1,18,668
	Kari Shumali ...	34,416	46,161	30,073	61,019	33,759	70,704	34,751	56,125	39,181	60,676
	Nasir ...	27,379	49,110	29,308	62,362	29,259	62,589	28,445	64,730	29,272	54,825
	Other Canals ...	22,901	48,581	20,537	56,940	22,372	58,046	25,420	64,523	24,404	61,557
		254,638	5,06,065	274,871	6,50,722	273,560	5,83,376	267,420	5,46,267	270,919	5,78,839
Fuleli Canals ...	Other Canals ...	17,917	43,458	31,184	55,167	18,549	45,687	22,550	48,199	19,915	48,799
	Ujjaipur Bund ...	...	...	...	...	...	...	...	...	...	...
		17,917	43,458	31,184	55,463	18,549	45,687	22,650	48,199	19,915	48,799

TABLE I—continued.

Canals and Executive Districts.	1888-89.		1889-90.		1890-91.		Average.		1891-92.	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
1	2	3	4	5	6	7	8	9	10	11
MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.										
Canals in Operation—continued.										
Canals North of Kotri	14,410	23,089	17,770	32,882	17,177	13,158	27,040	0	1,540	17,685
Kalri	10,060	22,864	17,748	24,010	12,799	36,271	11,384	27,013	12,773	27,498
Baghar	18,867	38,715	22,851	48,881	23,707	32,568	21,898	46,565	24,836	63,311
Tehla	10,345	19,211	9,830	19,367	17,018	22,057	10,727	30,763	11,983	23,921
Canals in Tatta, &c.	11,374	19,830	10,480	18,014	17,032	19,965	10,962	19,272	11,525	17,317
Shal Canals	3,927	6,494	2,965	7,493	3,143	3,565	3,043	8,88	3,916	7,417
Pinyari	66,924	1,69,283	77,948	1,89,553	68,448	1,81,537	71,103	1,82,918	66,228	1,57,325
Canals in Mirpur Bakoro	15,888	32,569	17,743	37,415	17,168	30,074	15,796	36,373	14,608	32,790
Kardchi Canals	6,883	17,133	7,891	13,304	3,321	15,113	7,359	15,267	7,202	13,698
Satta	8,538	17,327	8,543	18,317	10,906	16,637	9,409	17,432	9,545	19,777
Canals in Jati	2,122	3,728	2,051	4,794	2,164	4,739	2,312	5,094	2,070	4,582
Khanta	4,632	11,326	5,043	11,707	5,115	9,174	5,017	10,755	5,407	13,029
Kokawari	8,211	19,716	12,345	28,290	13,427	29,461	11,328	26,004	14,521	32,397
Canals in Shahbandar	1,406	3,270	1,694	3,831	3,057	4,469	1,709	3,920	1,958	4,719
Bunds, left bank	...	...	...	...	...	...	...	...	...	...
Bunds, right bank	...	...	...	...	...	...	...	...	...	...
	181,230	4,11,763	20,832	4,33,223	19,547	4,22,900	186,223	4,27,892	189,609	4,26,826
Total, Minor Works Revenue Accounts only	500,378	13,15,357	652,370	13,97,500	823,944	19,92,724	659,151	15,71,545	862,600	21,04,436
AGRICULTURAL.										
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.										
In Operation.										
Bagdari Canals District, Kashmir	3,625	6,624	5,363	9,954	4,559	8,287	4,616	8,292	3,717	6,103
Shikarpur Canals, Kashmir District	...	...	...	...	...	...	...	...	...	...
Canals in Sukkar Bagdari Bund	...	...	...	...	...	...	...	...	...	...
Ghar Canal District, Ghar Bunds	35	85	...	...	...	...	...	...	...	...
Western Nara District, Nara Bunds	...	...	...	...	...	...	...	...	...	...
Total, Agricultural Works	3,660	6,729	5,363	9,954	4,559	8,287	4,616	8,292	3,717	6,103
Bagdari Canals District	279,336	5,20,162	263,513	4,93,247	225,155	4,26,013	256,035	4,79,808	2,91,203	3,11,683
Shikarpur Canals	157,135	3,65,191	135,348	5,51,162	131,341	3,38,980	131,606	3,49,797	1,55,324	3,93,329
Ghar Canals	227,096	7,02,068	316,577	8,82,967	315,320	8,73,045	307,084	6,49,001	4,10,361	8,28,310
Western Nara	...	...	...	...	...	...	...	...	...	...
Eastern Nara	213,790	3,89,214	231,651	4,84,688	223,372	1,34,355	206,239	3,02,993	2,64,955	1,71,817
Hypersalad Canals	931,370	6,64,110	365,252	2,20,285	350,932	7,36,135	372,944	7,10,710	3,22,542	7,41,389
Pulchi Canals	252,494	5,46,719	291,916	6,16,540	296,063	6,33,705	282,490	5,99,534	2,80,841	6,15,861
Karachi Canals	181,296	4,11,753	206,832	4,34,232	191,547	4,22,900	193,223	4,27,892	1,80,060	4,26,826
	1,685,310	36,09,797	18,71,359	39,35,102	1,955,157	45,27,815	17,97,866	33,15,445	19,40,717	45,02,441

Note.—The figures in this Statement are based on assessments.
Add—Assessment on unauthorized cultivation

45,02,441
39,733

45,41,614

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE II.

Area of Cultivation and Canal Revenue for 1891-92, and five previous years.

Years.	CULTIVATION.			Water share of net canal-irrigated Revenue.	Hakka.	Miscellaneous.	Total Canal Revenue.
	Government.	Jaghir.	Total.				
1	2	3	4	5	6	7	8
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
1886-87	1,783,669	229,081	1,914,650	35,39,499	1,40,023	45,485	37,77,985
1887-88	1,655,257	217,387	1,872,644	37,20,897	1,72,603	49,790	39,43,290
1888-89	1,837,556	231,079	2,068,635	43,25,697	1,94,135	49,601	44,69,436
1889-90	2,109,904	240,015	2,349,919	45,83,932	1,82,646	56,767	47,91,345
1890-91	1,945,157	235,316	2,180,473	45,27,815	1,21,380	55,105	47,04,300
	Average	1,839,462	221,576	2,071,533	41,20,447	1,44,140	43,24,912
1891-92	1,949,717	215,914	2,165,631	45,02,441	92,400	63,709	45,58,550
Increase or Decrease	+109,755	-15,562	+94,093	+3,72,904	-51,740	+7,134	+3,34,433

* Includes land in Khelat watered by British Canals.

† For details vide Table III A.

Note.—The figures in this statement, with the exception of Hakka and Miscellaneous, which are actual realizations, are based on assessment.
It has not been possible to recast this table on the same model as others there being no data.

Add—Assessment on unauthorized cultivation
146,58,760
39,733
46,97,953

H. M. THOMPSON, M.Inst.C.E.,
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TABLE III.

Area of Cultivation and Canal Revenue for 1891-92.

Canals and Districts.	CULTIVATION.			Water-share of net consolidated Revenue as in Table VII.	Hakāba.	Miscellaneous.	Total Canal Revenue.	
	Government.	Jāghir.	Total.					
1	2	3	4	5	6	7	8	
MAJOR WORKS.								
PRODUCTIVE WORKS.								
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.								
Canals in Operation.								
Begāri Canals	{ Desert Canal	31,777	*28,353	60,130	17,203	9,369	365	26,937
	{ Unharwāh	14,233	...	14,233	15,378	...	23	15,001
	{ Begāri	146,426	*28,293	174,719	2,72,799	14,129	225	2,87,133
		197,486	56,646	254,132	3,03,580	23,498	613	3,20,691
Eastern Nāra...	{ Nāra Supply Channel	3,411	4,612	8,023	8,723	1,732	6,730	17,185
	{ Eastern Nāra	29,842	...	29,842	49,243	...	8,739	67,932
	{ Mithan Canal	119,060	...	119,060	2,53,212	...	1,630	2,54,842
	{ Dinwāh	7,439	...	7,439	12,538	...	...	12,538
	{ Haranwāh	2,653	...	2,653	5,429	...	...	5,429
	{ Kipra Canal	7,679	...	7,679	13,421	...	15	13,436
	{ Thar Canal	34,851	2,384	37,235	75,251	1,182	413	76,846
		204,955	6,996	211,951	4,17,817	2,914	17,927	4,38,258
Major Works		402,441	63,642	466,083	7,23,397	26,412	18,140	7,67,949
43.—MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.								
Canals in Operation.								
Ghār Canals	{ Sukkur Canal	87,103	2,240	89,343	2,17,565	1,364	1,743	2,20,677
	{ Ghār Canal	232,277	7,092	239,369	7,09,345	2,440	7,779	7,19,464
		319,380	9,332	328,712	9,26,810	3,804	9,527	9,40,141
Hyderabad Canals	{ Mehrabwāh	13,168	199	13,367	24,274	1	160	24,435
	{ Alibhār Kacheri	9,250	1,572	10,822	16,495	709	45	17,249
	{ Mo. ak	47,004	7,047	54,111	96,079	2,464	338	98,881
	{ Sarfrazwāh	22,141	4,983	27,124	37,735	1,948	175	39,858
		91,623	13,801	105,424	1,74,583	5,122	718	1,80,423
Fuleli Canal District	{ Fuleli	259,926	53,009	324,935	5,67,062	25,842	6,472	5,99,376
Total, Minor Works Capital and Revenue Accounts		680,929	78,142	759,071	16,68,455	34,768	16,717	17,19,940
MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.								
Canals in Operation.								
Shikārpur Canals	{ Canals in Rohri	72,033	5,646	77,684	2,02,258	2,742	1,212	2,06,212
	{ Buns in Rohri	...	...	...	...	...	49	49
	{ Sind Canal	63,486	4,339	67,825	1,83,051	3,186	1,649	1,87,916
		135,524	9,985	145,509	3,85,339	5,928	2,910	3,94,177
Western Nāra	{ Nāra	190,825	16,113	206,938	5,33,967	6,673	14,403	5,55,043
	{ Manchar	8,987	...	8,987	20,406	...	...	20,406
	{ Aral	8,178	...	8,178	22,577	...	...	22,577
	{ Pritchard Canal	8,073	...	8,073	21,707	...	...	21,838
	{ Wāhur	6,404	...	6,404	15,307	...	30	15,337
	{ Marri	4,201	...	4,201	11,795	...	472	12,267
	{ Phitta	8,334	643	8,982	18,744	623	485	19,852
	{ Dādū Canals	71,601	304	71,905	22,133	120	76	22,349
		246,803	17,065	263,668	6,66,716	7,416	15,534	6,89,666

* Includes foreign cultivation in Kelāt.

TABLE III—continued.

Canals and Districts.	CULTIVATION.			Water-bhare of net com- pensated Revenue as in Table VII.	Hakāba.	Miscell- aneous.	Total Canal Revenue.
	Government.	Jāghir.	Total.				
1	2	3	4	5	6	7	8
MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.							
<i>Canals in Operation—continued.</i>							
Hyderabad Canals ...	Nasrat ...	24,590	549	25,139	58,414	188	59,056
	Naslakhi ...	49,382	1,896	51,278	1,11,148	672	1,11,708
	Dambro ...	11,318	1,029	12,347	24,037	329	24,655
	Dadwāh ...	27,788	6,133	33,921	57,901	2,072	60,714
	Kenwāh ...	17,046	43	17,089	31,169	5	31,437
	Ghāro Mahmūda ...	55,925	14,439	70,364	1,18,468	4,538	1,24,083
	Kari Shumali ...	30,131	9,326	39,457	60,676	3,961	64,981
	Nasirwāh ...	26,275	2,082	28,357	54,385	725	55,256
	Other Canals ...	28,464	1,770	30,234	61,587	554	62,486
		270,919	37,267	308,186	5,76,806	13,064	5,93,876
Fuleli Canals...	Other Canals ...	19,915	922	20,837	48,799	501	49,698
	Hajipur Bund ...	...	...	...	...	...	...
		19,915	922	20,837	48,799	501	49,698
Karachi Canals ...	Canals North of Kotri ..	7,540	971	8,511	17,685	400	18,436
	Kalri ...	12,773	343	13,116	27,498	94	28,256
	Baghar ...	24,826	2,413	27,239	63,311	1,196	64,613
	Uchita ...	11,383	...	11,383	21,921	...	22,294
	Canals in Tatta ...	8,565	1,081	9,646	17,347	624	18,378
	Shal Canal ...	2,926	...	2,926	7,447	...	7,465
	Pinjari ...	66,923	1,991	68,914	1,37,320	877	1,40,592
	Canals in Mirpur Batorā	14,648	...	14,608	35,780	19	35,799
	Canals in Sujawal ...	7,202	306	7,508	13,698	204	13,964
	Satta ...	9,583	260	9,843	19,777	132	19,960
	Canals in Jati ...	2,076	107	2,183	4,982	...	5,022
	Khanta ...	5,407	139	5,546	13,079	...	13,110
	Kokawari ...	14,521	...	14,521	32,307	...	33,060
	Canals in Shāhbādar ...	2,034	257	2,291	4,719	10	4,901
	Bunds, left bank ...	...	298	298	...	88	255
	Bunds, right bank ...	...	725	725	...	298	324
		189,669	8,891	198,560	4,26,826	4,311	4,36,429
Total, Minor Works Revenue Accounts only ...		862,630	74,180	936,760	21,04,488	31,220	21,63,946
AGRICULTURAL WORKS, WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.							
<i>In Operation.</i>							
Begāri Canals District...	Kāshmor Bund ...	3,717	...	3,717	6,108	322	6,425
Shikārpur Canals Dis- trict.	Kāsinpur Bund ...	...	...	...	...	15	15
	Sukkur Begāri Bund ...	...	...	...	...	409	409
		...	...	...	...	424	424
Ghār Canals District ...	Ghār Bunds ...	...	...	...	...	123	123
Western Nāra District...	Nāra Bunds ...	...	...	...	...	33	33
		...	...	...	...	156	156
<i>Agricultural Receipts.</i>							
Eastern Nāra ...	...	...	...	...	...	3	3
Fuleli Canals ...	...	...	...	...	...	1	1
Karachi Canals ...	...	...	...	...	...	6	6
	...	...	...	...	...	...	10
Begāri Canals District ...	...	201,203	56,646	257,849	3,11,383	935	3,36,116
Shikārpur Canal District ...	...	135,544	9,985	145,509	3,85,339	5,928	3,94,601
Ghār Canal District ...	...	310,380	9,332	328,712	9,26,110	3,804	9,40,264
Western Nāra District ...	...	246,603	17,065	263,668	6,66,716	7,416	6,89,699
Eastern Nāra District ...	...	204,953	6,996	211,951	4,17,117	2,914	4,38,261
Hyderabad Canals District ...	...	362,542	51,068	413,610	7,51,389	18,186	7,74,299
Fuleli Canals District ...	...	289,841	55,931	345,772	6,15,861	26,343	6,49,075
Karachi Canals ...	...	189,663	8,891	198,560	4,26,826	4,311	4,36,435
		19,49,717	2,16,914	21,65,631	44,02,441	92,400	46,58,750

Note. The figures in this statement, with the exception of Hakāba, Miscellaneous which are actuals are based on assessment.

* Includes Rs. 283 realized by Public Works Department.

Add—Assessment on unauthorized cultivation ...

145,01,441
39,283
45,41,674
82,410
65,909
45,87,068

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TABLE III-A.

Area of Cultivation, Assessments and Realizations and Balances outstanding in respect of Lands in
Khetlat and Jughir Lands in Sind for 1891-92.

Canals and Executive District.		AREA CULTIVATED DURING YEAR.			Un- realized Balance at end of last year.	ASSESSMENT OF THE YEAR.			Remis- sion.	Total for collection.	Actual realiza- tion.	Balance out- standing at end of year.
		Kharif.	Rabi.	Total.		Kharif.	Rabi.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	
MAJOR WORKS.												
PRODUCTIVE WORKS.												
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.												
Canals in operation.												
Begari Canal. (Khetlat Lands (Foreign).	Desert Canal ...	28,300	5,133	28,333	10,345	23,201	5,133	28,334	9,859	27,823	9,261	28,462
	Begari Canals ...	16,941	5,693	22,739	4,381	16,693	5,698	22,391	176	26,601	11,380	15,221
		39,541	10,831	50,722	23,734	39,594	10,831	50,725	10,035	64,424	21,741	43,683
	Desert Canal ...	...	...	20	7	6	...	6	...	13	8	5
	Unharwah ...	...	997	5,904	232	2,870	497	2,867	...	3,099	2,486	613
	Begari ...	...	997	5,924	240	2,276	497	2,873	...	3,112	2,494	618
		4,518	11,828	56,646	23,973	42,270	11,828	53,598	10,035	67,538	23,335	44,201
	Nara Supply Channel ...	10	4,602	4,612	2	4	1,726	1,730	...	1,732	1,732	...
	Eastern Nara ...	...	...	...	...	...	...	...	...	...	...	...
	Mithrao Canal ...	...	...	...	...	...	...	...	...	...	...	...
Eastern Nara.	Dunwah ...	...	...	...	...	...	...	...	...	...	...	...
	Harawal ...	...	...	...	...	...	...	...	...	...	...	...
	Khapa Canal ...	...	...	...	...	...	...	...	...	...	...	...
	Thar Canal ...	...	...	...	...	...	...	...	...	...	...	...
	1,848	5,148	6,996	16	667	1,931	2,398	...	2,914	2,914	...	
Total Major Works ...		46,666	1,376	63,642	21,939	41,270	13,239	56,496	10,035	70,430	26,149	44,401
43.—WORKS FOR WHICH CAPITAL REVENUE ACCOUNTS ARE KEPT.												
Canals in operation.												
Ghar Canals.	Sukkur Canal ...	1,431	809	2,240	705	782	424	1,206	...	1,911	1,364	547
	Ghar Canals ...	5,740	1,352	7,092	38	2,270	407	2,676	...	2,724	2,440	284
		7,171	2,161	9,332	743	3,051	831	3,882	...	4,635	3,804	831
		...	...	...	...	...	...	...	...	...	...	...
Hyderabad Canals.	Meharwah ...	171	28	199	...	1	...	1	...	1	...	...
	Atthar Kachari ...	1,533	39	1,572	13	689	12	692	...	705	709	...
	Marak ...	6,890	107	7,047	294	2,143	47	2,195	...	2,439	2,464	...
	Barra ...	4,701	282	4,983	643	1,540	90	1,630	...	2,278	1,919	330
	13,255	546	13,811	805	4,369	149	4,518	...	5,413	5,123	291	
Fuleh Canal ...	Fuleh ...	49,427	5,532	55,009	4,213	21,002	2,228	23,230	...	27,443	26,842	1,601
Total Minor Works Capital Revenue Accounts ...		69,833	8,389	78,142	5,831	28,432	3,208	31,640	...	37,492	34,768	2,723
MINOR WORKS IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.												
Canals in operation.												
Shikarpur Canal.	Canals in Rohri ...	2,196	3,450	5,646	1,247	904	3,305	2,299	...	3,456	2,742	714
	Bunds in Rohri ...	3,964	345	4,309	2,300	2,183	101	2,349	...	4,640	3,196	1,443
	Sind Canal ...	...	...	...	...	...	...	...	...	...	...	...
		6,160	3,795	9,955	3,547	3,087	1,406	4,558	...	8,101	5,938	2,177
Western Nara.	Nara ...	10,675	5,438	10,113	1,525	4,512	3,560	8,172	...	9,597	6,673	2,924
	Manchar ...	...	...	...	...	...	...	...	...	...	...	...
	Arul ...	...	...	...	...	...	...	...	...	...	...	...
	Pritchard Canal ...	...	...	...	...	...	...	...	...	...	...	...
Hyderabad Canals.	Wair ...	...	...	...	...	...	...	...	...	...	...	...
	Ma vi ...	...	...	...	...	...	...	...	...	...	...	...
	Phitta ...	559	98	649	443	179	33	212	...	655	633	32
	Dadu Canals ...	223	81	304	14	82	54	136	...	150	130	20
	11,448	5,617	17,065	1,982	4,773	3,047	8,420	...	10,412	7,116	2,986	
Hyderabad Canals.	Nasrat ...	334	215	549	12	126	63	199	...	212	158	14
	Nolakh ...	1,733	143	1,876	79	616	40	656	...	735	672	63
	Dunbro ...	991	33	1,023	—2	3,36	3	331	...	329	329	...
	D Awah ...	5,818	515	6,333	6	1,963	100	2,063	...	2,069	2,072	...
Hyderabad Canals.	Rewah ...	...	...	...	...	...	...	...	...	...	...	...
	Guro Mahmuda ...	13,990	449	14,439	59	4,759	132	4,891	...	5,082	4,755	324
	Rani Shumali ...	9,394	32	9,326	1,217	3,189	10	3,199	...	4,410	3,761	449
	Nasirwan ...	2,044	28	2,032	143	619	10	629	...	796	725	41
	1,62	48	1,770	5	460	121	601	...	646	554	52	
Total Minor Works Capital Revenue Accounts ...		35,604	1,633	37,267	2,055	11,668	481	12,149	...	14,204	13,034	1,140

TABLE III-A—continued.

Canals and Executive District.	AREA CULTIVATED DURING YEAR.			Un-realized Balance at end of last year	ASSESSMENT OF THE YEAR.			Remission.	Total for collection.	Actual Realization.	Balance outstanding at end of year.
	Kharif.	Rabi.	Total.		Kharif.	Rabi.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12
MINOR WORKS IRRIGATION AND NAVIGATION—continued.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.											
Canals in operation—continued.											
Pulch Canal ... (Other Canals	868	54	922	122	357	11	368	...	400	501	+11
Bappur Band	...	...	...	...	...	...	...	...	...	...	...
	868	54	922	122	357	11	368	...	400	501	+11
Canals North of Kotri ...	350	501	921	222	136	308	524	...	746	400	346
Kairi	228	15	243	94	128	6	134	...	238	94	144
Baghar	1,140	1,273	2,413	853	449	469	918	...	1,741	1,186	555
Yicheta	...	...	...	...	...	...	...	...	...	...	...
Canals in Tutta, &c. ...	826	255	1,081	142	503	63	566	...	708	624	84
Shal Canal	1,922	69	1,991	37	798	44	842	...	879	877	2
Pharyari	...	...	...	...	...	...	...	...	...	...	...
Canals in Mirpur Batora ...	217	50	266	127	107	18	125	...	252	294	48
Canals in Sujawal	300	...	300	60	112	...	112	...	172	172	...
Canals in Jati	107	...	107	2	48	...	48	...	50	40	10
Khanika	139	...	139	1	66	...	66	...	67	67	...
Sokowari	...	...	...	...	...	...	...	...	...	...	...
Canals in Shikharbandar ...	217	...	217	55	117	...	117	...	172	172	...
Banda, left bank	298	...	298	56	143	...	143	...	199	167	32
Banda, right bank	725	...	725	19	751	...	751	...	350	298	52
	6,629	2,262	8,891	1,068	2,939	97	3,036	...	5,575	4,311	1,264
Total Minor Works Revenue Accounts only ...	60,709	13,261	74,139	9,374	22,419	6,288	28,707	...	38,776	31,230	7,546
AGRICULTURAL WORKS.											
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.											
In operation.											
Bogari Canals— Kashmor Band ...	...	...	...	...	...	...	...	...	...	...	...
Shikarpur (Kashmor Band	...	...	...	...	...	...	...	...	...	...	...
Sucker Bogari Band ...	...	...	...	...	...	...	...	...	...	...	...
Ghar Canal ... Ghar Banda	...	...	...	...	...	...	...	...	...	...	...
Western Nara ... Nara Banda ...	...	...	...	...	...	...	...	...	...	...	...
Total, Agricultural Works ...	...	...	...	...	...	...	...	...	...	...	...
Bezari Canal District	44,918	11,838	56,646	23,973	42,170	11,378	53,548	10,035	67,436	23,235	44,201
Shikarpur Canals	6,190	3,705	9,895	3,547	5,532	1,066	6,598	...	8,105	5,928	2,177
Ghar Canal	7,171	2,161	9,332	733	3,061	531	3,592	...	4,485	3,844	641
Western Nara	11,148	5,817	17,065	1,881	4,773	3,347	8,120	...	10,002	7,416	2,586
Western Nara	1,848	5,148	6,996	16	1,677	1,931	3,608	...	2,914	2,914	...
Hydro-electric Canals	48,881	2,178	51,059	2,960	16,637	640	17,277	...	16,617	18,186	1,569
Politi Canals	50,295	5,636	55,931	4,335	21,656	2,239	23,895	...	27,663	26,343	1,320
Karachi Canals	6,229	2,262	8,491	1,068	2,939	97	3,036	...	5,575	4,311	1,264
	177,278	38,626	215,914	89,214	94,429	23,050	1,17,479	10,035	1,46,717	92,131	54,586

*Exclusive of Rs. 261 realized by the Public Works Department.

Note.—The figures in this statement are based on assessment, with the exception of those in column 12, which are actuals.

Unrealized balances at end of last year differ from those given in last year's report, but they have been communicated as such by the Revenue Department.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE IV.

Revenue Expenditure on New Works, Maintenance and Repairs Establishment charges in the Public Works Department and Revenue Department on Irrigation Works in Sind during the year 1891-92.

Canals and Executive District.	REVENUE EXPENDITURE.										Revenue Collection charges.	Total Columns 6 to 12.	TOTAL EXPENDITURE.					
	Improvements.				Maintenance and Repairs.								Works.	Establishment.		Indirect charges.	Total.	
	Works.	Regular Establishment.	Tools and Plant.	Total.	Clearance Expenditure.			Regular Establishment.	Tools and Plant.	Total.								
					Works.	Work Establishment.	Total.											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
MAJOR WORKS, PRODUCTIVE WORKS.																		
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.																		
Canals in operation.																		
Becri Canal District.	Desert Canal ...	34,816	10,864	113	45,733	41,914	5,993	(a)47,907	14,866	155	62,928	4,375	67,303	82,723	(b)25,933	4,375	3,994	1,17,030
	Unharwah ...	...	...	...	...	3,174	2,731	5,905	1,833	80	7,818	1,425	9,243	5,905	1,913	1,425	257	9,500
	Begdri ...	25204	7,799	131	33,044	14,139	7,094	2,123	6,495	110	27,338	26,813	54,651	46,437	(c)14,445	26,813	5,905	90,000
		60,020	18,613	244	78,777	59,227	15,818	75,045	23,194	340	98,584	32,613	1,31,197	1,35,063	42,296	32,613	6,556	2,16,530
Eastern Nara District.	Nara Supply Channel ...	...	...	...	...	709	1,187	1,896	275	—84	2,057	1,046	3,133	1,896	191	1,046	33	3,191
	Eastern Nara ...	351	81	115	...	6,813	8,404	15,217	3,509	4,999	23,725	5,465	29,190	15,568	8,704	5,465	503	30,240
	Mithrau Canal ...	...	...	...	...	10,939	6,747	27,696	10,459	74	38,219	25,369	65,598	27,656	10,133	25,369	1,464	65,022
	Himrah ...	...	...	...	...	3,286	567	3,803	733	...	4,596	1,247	5,733	3,303	733	1,247	103	5,856
	Harauwah ...	...	...	...	...	73	...	73	13	...	2,769	543	629	73	13	543	2	631
	Khapra Canal ...	...	...	...	...	1,351	971	2,322	447	...	2,769	1,345	4,114	2,322	447	1,345	62	4,176
	Thar Canal ...	...	...	...	...	2,173	1,823	4,054	5,977	2,750	...	8,627	7,596	16,223	7,537	3,443	7,596	423	18,573
	...	...	...	115	2,720	34,944	21,930	56,874	18,186	4,989	80,049	42,611	1,22,669	58,705	24,064	42,611	2,654	1,28,934
	Total Major Works ...	61,371	19,287	359	81,497	94,717	37,749	1,21,919	41,280	5,334	1,78,633	75,224	2,53,837	1,93,770	68,360	75,224	9,210	3,44,564
48.—MINOR WORKS, IRRIGATION AND NAVIGATION.																		
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.																		
Canals in operation.																		
Chief Canal District.	Sukkur Canal ...	...	...	...	...	15,487	5,782	21,269	6,429	104	27,802	14,830	42,641	21,599	6,533	14,839	900	43,541
	Ghar Canal ...	252	85	1	268	60,916	11,037	71,955	21,748	352	94,056	60,286	1,54,341	72,237	22,186	60,286	3,180	1,57,889
		252	85	1	268	76,405	16,819	93,224	23,177	456	1,21,887	75,125	1,96,932	93,696	28,719	75,125	4,080	2,01,430
Hydrabad Canal District.	Mehrabwah ...	...	...	...	...	6,919	1,536	8,455	1,894	60	10,409	2,400	12,809	8,455	1,954	2,400	265	13,074
	Aibhar Kachheri ...	...	...	...	...	4,611	1,019	5,630	1,261	40	6,931	878	7,809	5,630	1,301	878	177	7,956
	Marak ...	...	...	...	...	29,450	3,622	33,072	7,353	231	40,696	6,206	46,894	33,072	7,614	6,208	1,034	47,928
	Sarfras ...	9,307	2,062	66	11,435	5,760	2,446	8,203	1,518	58	10,082	2,853	12,935	17,513	4,004	2,853	543	24,913
	9,307	2,062	66	11,435	46,740	9,823	55,363	12,356	389	68,103	12,339	80,447	64,670	14,873	12,339	2,019	93,901	
Fuleli Canal District.	Fuleli ...	6,917	1,480	28	8,423	1,45,204	13,186	1,58,390	33,882	605	1,92,877	46,248	2,39,125	1,65,307	35,993	46,248	6,228	2,53,776
		16,506	3,627	93	20,226	2,68,349	38,623	3,06,977	74,415	1,450	3,82,842	1,38,712	5,16,554	3,23,483	79,585	1,33,712	12,327	5,49,107
MINOR WORKS, IRRIGATION AND NAVIGATION, WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.																		
Canals in operation.																		
Sind Canal District.	Canals in Rohri ...	1,646	280	10	1,936	31,641	7,167	38,808	6,605	222	45,635	20,510	66,145	40,464	7,117	20,510	...	68,681
	Bunds in Rohri ...	...	...	...	...	690	1,038	1,668	277	9	1,914	...	1,914	1,628	286	...	...	1,914
	Sind Canal ...	...	...	...	...	17,646	3,241	20,887	3,658	119	24,561	18,656	43,196	20,887	3,674	18,656	...	43,196
		1,646	280	10	1,936	49,877	11,446	61,323	10,437	350	72,110	39,145	1,11,255	62,969	11,077	39,145	...	1,13,191

Notes—(a) Includes Rs. 8 on account of compensation of land.

(b) Exclusive of Rs. 2,861 on account of collecting establishment in Khelat.

(c) Exclusive of Rs. 2,201 on account of collecting establishment in Khelat.

TABLE IV—continued.

REVENUE EXPENDITURE.												TOTAL EXPENDITURE.						
Canals and Executive District.	Improvements.				Maintenance and Repairs.							Revenue Collection charges.	Total, Columns 6 to 12.	Establishment.				Total.
	Works.	Regular Establishment.	Tools and Plant.	T al.	Clearance Expenditure.			Regular Estab-lish-ment.	Tools and Plant.	Total.	Works.			Public Works Department (in-cludes Tools and Plant.	Civil Department Collection charges.	Indirect charges.		
					Works.	Work Estab-lish-ment.	Total.											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
MINOR WORKS, IRRIGATION AND NAVIGATION—continued.																		
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.																		
Canals in operation—contd.																		
Western Nara District.	Nara	54,269	10575	314	65,158	21,778	13,158	34,936	6,808	202	41,910	59,266	1,01,212	89,205	17,899	59,266	...	1,66,370
	Pritchard Canal	49,236	9,595	285	59,116	11,705	...	11,705	2,231	68	14,004	1,532	15,600	60,941	12,329	1,532	...	74,723
	Wahur	...	...	...	...	1,794	115	1,909	372	11	2,352	1,224	3,516	1,909	383	1,234	...	3,536
	Marti	...	...	...	...	1,659	204	1,863	363	11	2,347	1,800	4,197	1,863	374	1,960	...	4,197
	Phitta	...	...	...	...	833	996	1,659	329	10	2,012	2,229	4,257	1,659	339	2,229	...	4,257
	Dada Canals	1,913	373	11	2,297	7,582	472	8,004	1,560	96	9,610	2,185	11,795	9,917	1,990	2,185	...	14,092
		1,05,418	20,542	610	1,26,571	45,161	14,945	60,166	11,718	348	72,167	68,416	1,40,583	1,65,524	33,214	68,416	...	2,67,154
		122	32	1	155	12,838	2,307	15,040	3,920	107	19,067	5,509	24,927	16,192	4,060	5,860	...	25,082
	Nasakhil	200	52	1	253	12,915	2,229	15,144	3,947	108	19,199	10,082	30,281	15,514	4,108	11,082	...	30,533
	Dambro	...	...	...	...	7,309	1,322	8,631	2,249	61	10,441	2,139	13,380	8,631	2,310	2,439	...	13,880
Dadwahi	406	106	3	515	10,797	2,872	13,669	3,563	97	17,829	23,326	14,075	3,769	5,997	...	33,941		
Renwah	6,493	1,692	46	8,231	9,729	2,475	11,195	2,518	80	14,193	17,310	17,668	4,736	8,117	...	25,541		
Charo Mahmooda	...	...	...	...	50,806	4,090	54,896	14,308	391	69,495	12,300	81,895	48,394	14,029	12,300	...	92,399	
Kari Shumail	...	...	...	...	11,150	2,341	13,491	3,516	96	17,103	6,496	23,599	14,029	6,496	...	23,599		
Nasirwah	...	...	...	...	10,382	3,328	13,710	3,573	98	17,381	5,511	22,892	14,029	5,511	...	22,892		
Other Canals	...	...	...	...	12,408	2,960	14,468	3,771	103	18,342	6,214	24,556	14,029	6,214	...	24,556		
	7,321	1,832	51	9,154	1,37,320	29,994	1,60,244	41,765	1,141	2,03,192	59,019	2,62,160	1,67,165	44,838	59,019	...	2,71,223	
Other Canals	...	...	...	...	9,713	1,251	10,964	2,409	44	13,417	4,930	18,347	10,964	2,453	4,930	...	18,347	
Hajipur Bund	...	...	...	...	4,282	527	4,809	1,057	19	5,885	...	5,885	4,809	1,076	...	...	5,885	
	...	...	...	...	13,995	1,775	15,773	3,466	63	19,302	4,930	24,232	15,773	3,529	4,930	...	24,232	
Karachi Canals District.	Canals north of Kotri	...	...	...	2,782	483	3,265	841	12	4,118	1,798	5,916	2,365	833	1,798	...	5,916	
	Kabri	...	...	...	7,164	1,754	8,918	2,297	32	11,247	2,829	14,076	9,915	2,329	2,829	...	14,076	
	Baghar	...	...	...	13,866	2,220	16,085	4,142	57	20,284	5,494	25,778	16,093	4,190	5,494	...	25,778	
	Uchita	...	...	...	413	...	413	106	7	520	2,157	2,677	413	107	2,157	...	2,677	
	Canals in Tatta, &c.	...	...	...	6,177	424	6,601	1,700	23	8,324	1,744	10,063	6,601	1,723	1,744	...	10,063	
	Sial Canals	...	...	...	2,008	321	2,329	600	8	2,937	766	3,693	2,329	600	766	...	3,693	
	Puyari	2,994	771	11	3,776	36,524	8,537	45,061	11,759	162	57,582	16,016	73,600	46,555	12,703	16,016	...	77,776
	Canals in Mirpur	...	...	...	...	5,684	1,207	6,891	1,776	25	8,691	3,659	12,880	8,801	1,900	2,680	...	12,880
	Canals in Sujawal	...	...	...	...	3,171	181	3,352	868	12	4,227	1,372	5,599	3,352	875	1,372	...	5,599
	Satta	...	...	...	...	2,803	185	2,988	563	8	3,559	4,769	2,388	571	2,010	...	4,769	
Canals in Jatti	...	...	...	...	629	...	629	116	8	1,167	524	1,691	926	24	524	...	1,691	
Khanra	...	...	...	...	3,250	965	3,945	1,018	14	4,975	1,285	6,260	3,945	1,030	1,285	...	6,260	
Kokawari	...	...	...	...	3,661	252	3,913	1,008	14	4,935	3,205	8,246	3,916	1,022	3,205	...	8,246	
Canals in Shidubandar	...	...	...	...	2,246	48	2,294	617	9	3,020	489	3,509	2,294	626	489	...	3,509	
Bunde Left Bank	9,837	2,933	35	12,805	48,151	5,731	53,882	13,876	191	67,949	32	67,981	62,719	16,033	32	...	80,836	
Bunde Right Bank	10,999	2,832	39	13,870	17,373	3,963	21,255	5,474	70	26,905	17	26,822	32,254	8,421	17	...	40,692	
	23,830	6,186	85	30,051	1,55,701	26,320	1,82,021	46,875	617	2,29,548	43,922	2,73,065	2,05,851	53,743	43,922	...	3,03,116	
Total, Minor Works Revenue Account only	1,38,118	28,841	756	1,67,715	4,02,064	77,413	4,79,467	1,14,256	2,548	5,96,272	2,16,032	8,11,304	6,17,582	1,46,402	2,16,032	...	9,79,016	
AGRICULTURAL WORKS																		
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.																		
In operation.																		
Barot District.	Kashmir Bund	308	79	3	390	6,415	15,764	22,179	5,673	181	28,033	590	28,623	22,487	5,836	590	...	29,013
	Kasimpur Bund	...	...	...	...	1,152	568	1,716	428	2	2,145	...	2,145	1,715	430	...	...	2,145
	Sukkur Bogari Bund	45,833	11,443	51	57,327	19,354	7,969	27,323	6,796	31	34,050	...	34,050	23,056	18,921	...	...	91,377
	45,833	11,443	51	57,327	30,406	8,532	38,938	7,224	33	36,195	...	36,195	74,771	18,751	...	...	93,522	

TABLE IV—concluded.

REVENUE EXPENDITURE.													TOTAL EXPENDITURE.						
Canals and Executive District.	Improvements.				Maintenance and Repairs.							Revenue Collection charges.	Total, Columns 6 to 12.	Establishment.					
	Works.	Regular Estab-lish-ment.	Tools and Plant.	Total.	Clearance Expenditure.			Regular Estab-lish-ment.	Tools and Plant.	Total.	Works.			Public Works Depart-ment (in-cludes Tools and Plant).	Civil Depart-ment Col-lection charges.	Indirect charges.	Total.		
					Works.	Work Estab-lish-ment.	Total.												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
AGRICULTURAL WORKS—contd.																			
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT—continued.																			
In operation—continued.																			
Older Canals District.	Ghat Bunde	3,211	460	45	3,980	3,340	6,307	40,313	2,440	48	12,801	...	12,801	43,324	3,263	...	...	16,787	
	Nara Bunde	...	...	...	...	6,238	2,149	9,337	2,097	80	30,551	...	10,561	8,382	2,177	...	...	10,561	
	Total Agricultural Works	49,338	12,382	69	61,789	36,603	33,112	69,517	17,234	342	87,203	800	88,183	1,19,169	30,137	500	...	1,19,866	
	Begiri Canals District	...	...	...	...	247	75,167	63,612	31,582	97,221	28,867	526	1,26,617	33,203	1,59,830	1,57,519	48,237	33,203	6,536	2,15,583
Shikarpur Canals District	...	...	...	...	61	69,963	70,263	19,978	90,261	17,461	333	1,08,308	32,115	1,47,450	1,37,710	29,828	39,146	...	2,06,713
Ghat Canals District	...	...	...	...	16	4,344	79,251	23,789	1,03,837	30,617	504	1,34,638	78,125	2,09,793	1,07,609	31,952	16,723	4,060	2,18,217
Western Nira District	...	...	...	...	410	1,36,371	51,329	17,694	68,163	78,810	428	82,738	68,416	1,51,717	1,78,911	33,221	68,416	...	2,57,718
Eastern Nira District	...	...	...	...	112	2,729	34,911	21,039	56,874	18,786	4,969	80,049	47,613	1,22,660	58,765	24,964	42,611	2,654	1,28,631
Hyderabad Canals District	...	...	...	...	111	20,519	7,54,080	31,547	2,16,097	54,121	1,580	2,31,238	71,358	8,42,616	2,32,134	19,712	71,358	2,019	3,85,221
Fuleti Canals District	...	...	...	...	28	8,823	1,10,100	44,061	1,74,163	27,318	609	2,12,179	6,1178	2,63,567	4,61,960	39,522	17,178	6,328	2,38,070
Karachi Canals District	...	...	...	...	85	30,081	1,56,701	26,320	1,61,021	46,978	647	2,29,543	43,532	2,73,005	2,04,832	53,743	43,522	...	3,03,116
Total	...	2,65,824	66,037	1,277	3,31,185	8,40,979	1,57,201	9,85,180	2,47,481	2,670	12,45,310	4,24,556	16,69,896	12,54,091	3,22,474	4,21,558	21,537	20,22,573	

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Canals and Executive District.		AVERAGE OF 3 PREVIOUS YEARS.			Per-centage of ex-pen-diture on Re-venue.	Cost of Main-tenance per acre.	1891-92			Per-centage of ex-pen-diture on Re-venue.	Cost of Main-tenance per acre.	LENGTH IN MILES.				
		Cultiva-tion.	Canal Revenue.	Main-tenance and Revenue Collection.			Cultiva-tion.	Canal Revenue.	Main-tenance and Revenue Collection.			Main Canals.	Branch-es.	Total.	Bunds.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
MAJOR WORKS.																
PRODUCTIVE WORKS.																
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.																
<i>Canals in operation.</i>																
Begari District.	Canal	(Desert Canal Unharwah ...)	121,884	1,89,894	47,291	24'96	0'4	60,130	45,908	67,303	166'60	1'1	73	117	190	190
		(Begari ...)	32,567	58,854	18,323	31'12	0'5	19,233	15,601	9,243	59'24	0'5	26	31	67	67
			176,417	3,14,000	85,317	27'17	0'5	174,193	2,98,242	54,951	15'32	0'3	78	100	176	176
			330,898	5,62,778	1,51,631	26'53	0'5	254,132	3,59,791	1,31,197	38'46	0'5	185	248	493	493
Eastern District.	Nara	(Nara Supply Channel ...)	7,175	16,852	4,193	22'25	0'6	8,023	17,183	3,133	18'23	0'4	12	...	12	19
		(Eastern Nara ...)	59,164	86,254	26,234	30'41	0'6	29,342	57,992	10,180	21'50	0'4	...	...	...	115
		(Mithan Canal ...)	118,192	2,37,507	67,173	28'28	0'6	119,060	2,54,832	7,783	24'94	0'5	93	62	155	93
		(Danwah ...)	6,583	11,599	2,818	24'06	0'4	7,439	12,638	2,789	46'12	0'8	28	...	28	28
		(Haranah ...)	2,483	4,462	529	11'65	0'2	2,653	5,439	929	11'58	0'2	3	...	3	3
		(Khilra Canal ...)	5,132	7,544	1,547	20'77	0'3	7,679	12,436	4,253	21'11	0'4	24	41	65	38
		(Thal Canal ...)	46,062	88,590	24,913	33'19	0'5	37,235	76,882	16,223	20'62	0'5	...	...	...	98
			243,736	4,54,848	1,37,450	28'02	0'5	211,951	4,39,242	1,25,000	27'98	0'6	175	103	278	241
			574,594	10,17,626	2,73,451	27'36	0'5	466,983	7,98,343	2,45,223	31'08	0'5	369	331	711	241
																952
45.—MINOR WORKS, IRRIGATION AND NAVIGATION.																
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.																
<i>Canals in operation.</i>																
Ghar Canals Dis- trict.	(Sukkur Canal ...)		87,106	2,08,095	40,569	19'40	0'5	89,343	2,20,510	42,641	19'34	0'6	74	58	132	132
	(Ghar Canal ...)		233,525	6,63,836	1,42,575	21'31	0'6	229,369	7,19,716	1,54,341	21'44	0'6	46	229	296	296
			340,631	8,59,481	1,83,144	21'31	0'6	329,712	9,40,229	1,96,982	20'59	0'6	120	308	428	428
Hyderabad Canal District.	(Mehrabah ...)		14,147	25,290	17,205	70'56	1'2	13,367	24,485	12,809	72'12	0'9	29	14	43	43
	(Alibhar Kacheri ...)		5,808	10,143	5,718	39'69	1'0	10,622	17,809	6,152	46'32	0'7	21	35	56	56
	(Mark ...)		49,553	96,726	28,064	29'54	0'6	54,111	98,612	46,894	47'55	0'9	23	160	133	1
	(Sairafwah ...)		26,184	38,367	21,226	55'32	0'8	27,124	39,540	12,965	33'71	0'5	82	40	122	184
			98,699	1,76,641	76,001	43'54	0'8	105,424	1,73,819	80,447	44'73	0'8	155	249	494	1
Fuleli Canals District.	(Fuleli ...)		314,190	6,81,307	2,39,655	44'67	0'8	324,935	5,98,794	2,39,123	40'07	0'7	98	901	999	999

† Includes Manchar and Aral.

TABLE V—continued.

Canals and Executive District.	AVERAGE OF 3 PREVIOUS YEARS.					1891-92.					Percentage of expenditure on Revenue.	Cost of Maintenance per acre.	LENGTH IN MILES.				
	Cultivation.	Canal Revenue.	Maintenance and Revenue Collection.	Percentage of expenditure on Revenue.	Cost of Maintenance per acre.	Cultivation.	Canal Revenue.	Maintenance and Revenue Collection.	Percentage of expenditure on Revenue.	Cost of Maintenance per acre.			Canals.			Bunds.	Total.
													Main Canals.	Branches.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
MINOR WORKS, IRRIGATION AND NAVIGATION.																	
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT																	
—continued.																	
Canals in operation—(continued.)																	
Canals North of Kotri ...	14,845	59,606	11,040	39.99	0.7	3,611	15,560	5,916	31.97	0.7	44	...	44	...	44		
Kotri ...	11,803	25,161	19,517	77.57	1.7	13,116	28,306	14,076	49.73	1.0	136	...	136	...	136		
Beghar ...	23,708	47,524	22,045	44.39	0.9	27,339	54,306	23,778	47.47	0.9	108	...	108	...	108		
Uchita ...	10,766	21,148	2,676	12.65	0.2	11,383	22,294	2,677	12.01	0.2	44	...	44	...	44		
Canals in Talta, &c. ...	12,276	20,764	13,781	60.37	1.1	9,843	18,320	10,068	54.96	1.0	83	...	83	...	83		
Shal Canals ...	3,043	6,862	3,165	53.99	1.0	2,929	7,445	3,493	49.47	1.3	18	...	18	...	18		
Pinyari ...	72,345	1,69,702	56,791	33.46	0.8	68,214	1,60,567	73,600	45.84	1.0	328	...	328	...	328		
Canals in Mirpur Khasi ...	15,896	36,354	10,114	27.99	0.6	14,608	35,799	12,380	34.58	0.4	81	...	81	...	81		
Canals in Sujawal, Satta ...	7,556	15,397	4,344	31.48	0.6	7,508	13,855	5,559	40.31	0.7	55	...	55	...	55		
Canals in Jati ...	9,624	17,545	5,664	39.12	0.7	9,845	19,000	4,769	23.67	0.5	68	...	68	...	68		
Khanta ...	2,254	5,005	1,670	26.37	0.7	2,183	5,000	1,691	33.62	0.6	11	...	11	...	11		
Khawra ...	5,101	10,823	3,643	37.93	1.9	5,546	13,109	6,260	47.75	1.1	69	...	69	...	69		
Kokawari ...	11,328	26,377	7,576	24.17	0.6	14,621	33,060	8,248	24.94	0.6	100	...	100	...	100		
Canals in Shahbandar ...	1,911	4,093	2,548	62.25	1.3	2,291	4,846	3,509	72.41	1.5	7	...	7	...	7		
Bunds, left bank ...	229	183	17,573	...	...	298	231	67,981	...	...	...	...	...	66	65		
Bunds, right bank ...	559	345	25,822	...	...	725	357	26,822	...	...	...	...	...	86	86		
Total, Minor Works Revenue Accounts only ...	203,275	4,33,944	1,27,369	52.37	1.1	193,560	4,36,025	2,73,695	62.63	1.4	1,112	...	1,112	151	1,263		
AGRICULTURAL WORKS.																	
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT																	
—continued.																	
In operation.																	
Begari Canals ... Kashmir Bund ...	4,516	8,519	55,971	...	...	3,717	6,425	25,623	...	...	...	...	...	48	48		
Shikarpur Canals ... Kashmir Bund ...	...	...	...	...	...	...	15	2,145	...	...	...	...	...	11	11		
Shikarpur Canals ... Sukkur Begari Bund ...	...	...	...	...	...	...	409	34,060	...	...	...	...	...	34	34		
...	...	...	...	...	...	...	424	36,196	...	...	...	...	...	45	45		
Ghar Canal District ... Ghar Bunds ...	297	10,741	66,826	...	...	...	123	12,801	...	...	...	...	...	43	43		
Western Nara ... Nara Bunds ...	...	...	...	...	...	...	83	10,564	...	...	...	...	...	79	79		
Total, Agricultural Works ...	4,813	19,260	1,04,897	...	...	3,717	7,005	88,183	...	...	...	...	...	215	215		
Begari Canals District ...	335,354	5,71,297	1,39,102	33.10	0.5	257,849	5,66,216	1,59,839	49.64	0.6	185	248	433	45	451		
Shikarpur Canals District ...	140,801	3,67,856	1,07,669	30.76	0.8	145,509	3,93,231	1,47,450	37.50	1.0	272	54	326	94	410		
Ghar Canals District ...	320,928	8,70,222	2,49,970	29.72	0.8	325,712	9,40,352	2,09,783	32.31	0.6	130	308	438	43	471		
Western Nara District ...	224,648	5,79,334	1,42,253	24.55	0.6	263,668	6,90,703	1,61,147	21.88	0.6	276	240	516	79	595		
Eastern Nara District ...	243,730	4,54,948	1,27,660	28.92	0.5	211,951	4,34,242	1,22,660	27.99	0.6	175	103	278	241	419		
Hydrabad Canals District ...	463,082	7,39,791	3,06,063	41.57	0.8	415,810	7,72,786	3,42,618	44.34	0.8	402	1,193	1,630	1	1,631		
Fuleli Canals District ...	337,949	6,80,234	2,58,023	45.70	0.8	345,772	6,46,339	2,63,357	40.75	0.8	173	973	1,146	13	1,157		
Karschi Canals District ...	205,275	4,53,944	2,47,339	52.37	1.1	193,560	4,36,025	2,73,695	62.63	1.4	1,112	...	1,112	151	1,263		
Total ...	2,209,594	46,35,106	16,37,721	35.33	0.74	2,165,631	46,83,878	16,60,898	35.85	0.77	2,804	3,064	5,868	669	6,527		
Agricultural Receipts ...						10											
						146,83,888											

*Details from Karschi Canals not yet received.

†Made up as under:—

Water share assessment ...	45,09,441
Hakata assessment ...	1,17,538
Miscellaneous actual ...	65,909
Total ...	46,33,888

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TABLE VI.
Direct and Indirect Receipts of Canal Revenue for 1891-92.

Canals and Executive Districts.	Water share of net consolidated Revenue as in Table VII.	Deduct average before improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakdats and Miscellaneous.	Receipts from Sales of Occupancy rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MAJOR WORKS,	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
PRODUCTIVE WORKS.						
49. IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.						
<i>Canals in operation.</i>						
Begári Canals District ... { Desert Canal	17,203	...	17,203	9,734	955	27,892
... { Unharwah	15,578	...	15,578	23	1,263	16,864
... { Begári	2,72,799	24,856	2,47,943	14,354	4,008	2,66,365
	3,05,580	24,856	2,80,724	24,111	6,286	3,11,121
Eastern Nára District ... { Nára Supply Channel	8,723	...	8,723	8,462	9	17,194
... { Eastern Nára	49,243	3,444	45,799	8,739	10	54,548
... { Midkhar Canal	2,58,212	...	2,58,212	1,630	33	2,64,875
... { Dimwah	12,538	...	12,538	...	12	12,550
... { Heranwah	5,429	...	5,429	...	...	5,429
... { Khipra Canal	13,421	...	13,421	15	...	13,436
... { Thar Canal	75,251	...	75,251	1,595	...	76,846
	4,17,817	3,444	4,14,373	20,441	64	4,34,878
Total Major Works ...	7,23,397	28,300	6,95,097	44,552	6,350	7,45,999
43. MINOR WORKS, IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in operation.</i>						
Ghár Canal District ... { Sukkar Canal	2,17,565	71,550	1,46,015	...	...	2,17,565
... { Ghár Canal	7,09,245	1,16,832	5,92,413	...	...	6,04,647
	9,26,810	1,88,382	7,38,428	13,331	2,431	7,54,190
Hyderabad Canals ... { Mehrabwah	24,274	...	24,274	161	263	24,698
... { Alibhar Kacheri	16,495	8,427	8,068	754	189	9,002
... { Marak	96,079	36,450	59,629	2,802	556	63,088
... { Sarfraz	37,735	1,155	26,580	2,123	427	29,130
	1,74,583	56,041	1,18,542	5,840	1,456	1,25,838
Fuleli Canal District ... Fuleli	5,67,062	1,30,284	4,36,778	32,314	1,719	4,70,811
Total, Minor Works Capital and Revenue Accounts ...	16,68,455	3,74,697	12,93,758	51,485	6,606	13,51,039
MINOR WORKS, IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in operation.</i>						
Shikárpur Canals ... { Canals in Rohri... ..	2,02,258	...	2,02,258	3,954	1,743	2,07,955
... { Bunds in Rohri... ..	...	...	...	49	...	49
... { Sind Canal	1,83,081	...	1,83,081	4,835	592	1,88,508
	3,85,339	...	3,85,339	8,538	2,335	3,96,512
Western Nára ... { Nára	5,33,967	...	5,33,967	21,076	1,260	5,56,303
... { Manchar... ..	20,406	...	20,406	...	...	20,406
... { Aral	22,577	...	22,577	...	...	22,577
... { Pritchard Canal	21,767	...	21,767	68	281	22,116
... { Wahur	15,307	...	15,307	30	12	15,349
... { Marvi	11,795	...	11,795	472	182	12,449
... { Phitta	18,744	...	18,744	1,108	320	20,172
... { Dadú Canals	22,153	...	22,153	196	243	22,392
	6,66,716	...	6,66,716	22,950	2,298	6,91,964
Hyderabad Canals ... { Nasrat	58,414	...	58,414	642	358	59,414
... { Naoikhi	1,10,149	...	1,10,149	1,059	295	1,11,504
... { Jambró	24,057	...	24,057	598	169	24,824
... { Dadwah	57,901	...	57,901	2,813	489	61,203
... { Benwah	31,169	...	31,169	268	138	31,575
... { Ghara Mahmuda	1,18,468	...	1,18,468	5,615	309	1,24,392
... { Kari Shumoli	60,676	...	60,676	4,305	490	65,471
... { Nasirwah	54,285	...	54,285	871	331	55,587
... { Other Canal	61,587	...	61,587	899	254	62,740
	5,76,806	...	5,76,806	17,070	2,834	5,96,710

*This question of average revenue before improvement of this canal is under enquiry and investigation.

TABLE VI—continued.

Canals and Executive Districts.	Water share of net consolidated Revenue as in Table VII.	Deduct average, before improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakāba and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MINOR WORKS, IRRIGATION AND NAVIGATION. WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Canals in operation—continued.						
Fuleli Canals ... { Other Canals	48,799	...	48,799	899	71	49,769
... { Hajipur bund ... ..	.....	.....	.....	...	...	.....
	48,799	...	48,799	899	71	49,769
Canals north of Kotri ...	17,685	...	17,685	751	146	18,582
Kalri	27,498	...	27,498	758	17	28,273
Baghar	53,311	...	53,311	1,302	32	54,645
Uchita	21,921	...	21,921	373	69	22,363
Canals in Tatta, &c. ...	17,347	...	17,347	1,031	11	18,389
Shal Canal	7,447	...	7,447	18	...	7,465
Pinyāri	1,57,325	...	1,57,325	3,287	357	1,60,969
Karachi Canals ... { Canals in Mirpur Batora ...	35,780	...	35,780	49	105	36,044
... { Canal in Sujawal	13,698	...	13,698	266	79	14,034
... { Satta	19,777	...	19,777	183	27	19,987
... { Canals in Jati	4,982	...	4,982	40	7	5,029
... { Khanta	13,029	...	13,029	81	19	13,129
... { Kokawari	32,307	...	32,307	753	41	33,101
... { Canals in Shahbandar ...	4,719	...	4,719	182	8	4,909
... { Bunds, left bank ... ..	.....	...	.....	255	...	255
... { Bunds, right bank ... ..	.....	...	.....	324	...	324
	4,26,826	...	4,26,826	9,603	900	4,37,329
Total, Minor Works Revenue Accounts are kept ...	21,04,486	...	21,04,486	53,360	8,438	21,72,284
AGRICULTURAL WORKS.						
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.						
In operation.						
Begāri Canals ... { Kashmir Bund	6,103	...	6,103	322	228	6,653
Shikārpur Canals ... { Kasimpur Band ... ..	.....	...	.....	15	...	15
... { Sukkur Begāri Band ... ..	.....	...	.....	409	...	409
	.....	...	.....	424	...	424
Ghār Canal District ... { Ghār Bunds ... ..	.....	...	.....	123	...	123
Western Nāra ... { Nāra bunds ... ..	.....	...	.....	33	...	33
Total, Agricultural Works ...	6,103	...	6,103	156	228	6,487
ABSTRACT FOR EACH CANAL DISTRICT UNDER ALL HEADS.						
Begāri Canals District ...	3,11,683	24,856	2,86,827	24,433	6,514	3,17,774
Shikārpur Canals District ...	3,35,339	...	3,35,339	9,262	2,335	3,46,936
Ghār Canals District ...	9,26,810	1,88,382	7,38,428	13,454	2,431	7,54,313
Western Nāra District ...	6,66,716	...	6,66,716	22,983	2,298	6,91,997
Eastern Nāra District ...	4,17,817	3,444	4,14,373	20,441	64	4,34,878
Hyderabad Canals District ...	7,51,389	56,041	6,95,348	22,910	4,290	7,22,548
Fuleli Canals District ...	6,15,861	1,30,284	4,85,577	33,213	1,790	5,30,580
Karachi Canals District ...	4,26,826	...	4,26,826	9,603	900	4,37,329
	45,02,441	4,03,007	40,99,434	1,56,290	20,622	42,76,365
Add—Agricultural Receipts ...				10	...	10
Total ...				1,56,309	20,622	* 41,76,365

Note.—The figures in this statement with the exception of Hakāba, Miscellaneous and occupancy fees, all of which are actuals are based on assessment.

Add—Assessment on unauthorized cultivation... * 41,76,365
39,233
42,15,598

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TABLE VI-A.

Actual Direct and Indirect Receipts of Canal Revenue in 1891-92, as shown in General Revenue Accounts of Executive Districts prepared by Examiner, Public Works Accounts.

Canals and Executive Districts.	Water share of net consolidated Revenue collected.	Debit average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakbra and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
PRODUCTIVE WORKS.						
49. IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.						
<i>Canals in operation.</i>						
Begari Canals District ... { Desert Canal	15,135	...	15,135	9,734	955	25,824
... { Unharwah	14,255	...	14,255	23	1,263	15,541
... { Begari	2,69,891	24,856	2,43,035	14,354	4,068	2,61,457
	2,97,281	24,856	2,72,425	24,111	6,286	3,02,822
Eastern Nara District ... { Nara Supply Channel	8,723	...	8,723	8,462	9	17,194
... { Eastern Nara	49,413	3,444	45,969	8,739	10	54,718
... { Midharo Canal	2,53,691	...	2,53,691	1,630	33	2,55,354
... { Dinurab	12,470	...	12,470	...	12	12,482
... { Heranwah	5,429	...	5,429	...	...	5,429
... { Kuipra Canal	13,450	...	13,450	15	...	13,465
... { Thar Canal	74,778	...	74,778	1,595	...	76,373
	4,17,954	3,444	4,14,510	20,441	64	4,35,015
Total, Major Works ...	7,15,235	28,300	6,86,935	44,552	6,350	7,37,837
43. MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in operation.</i>						
Ghar Canals ... { Sukkur Canal	2,18,372	71,550	1,46,822	3,112	...	1,50,350
... { Ghar Canal	7,14,439	1,16,832	5,97,607	10,241	2,615	6,09,841
	9,32,811	1,88,382	7,44,429	13,353	2,431	7,60,191
Hyderabad Canals ... { Mehrabwah	24,093	...	24,093	161	263	24,427
... { Althar Kacheri	14,495	8,427	8,068	754	180	9,002
... { Mirak	96,079	36,469	59,620	2,802	586	63,068
... { Safrazwah	3,77,735	11,135	26,590	2,723	427	29,130
	1,74,312	56,041	1,18,271	5,840	1,456	1,25,567
Fuleli Canals ... { Fuleli	5,66,927	1,30,284	4,36,643	32,314	1,719	4,70,676
Total, Minor Works Capital and Revenue Accounts ...	10,74,050	3,74,707	12,99,343	51,485	5,606	13,56,434
MINOR WORKS IRRIGATION AND NAVIGATION WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in operation.</i>						
Shikarpur Canals ... { Canals in Rohri	2,02,270	...	2,02,270	3,954	1,743	2,07,967
... { Bunds in Rohri	...	...	...	49	...	49
... { Sind Canal	1,83,078	...	1,83,078	4,835	592	1,88,506
	3,85,348	...	3,85,348	8,888	2,335	3,96,521
Western Nara ... { Nara	5,29,457	...	5,29,457	21,076	1,269	5,51,793
... { Manchar	22,048	...	22,048	...	...	22,048
... { Aral	25,267	...	25,267	...	...	25,267
... { Pritchard Canal	21,767	...	21,767	68	281	22,116
... { Wabur	14,623	...	15,523	30	12	15,565
... { Marvi	11,795	...	11,795	472	182	12,449
... { Phitta	18,731	...	18,731	1,108	320	20,159
... { Dadu Canals	22,152	...	22,152	196	243	22,591
	6,66,740	...	6,66,740	22,950	2,298	6,91,988
Hyderabad Canals ... { Nasrat	58,414	...	58,414	642	358	59,414
... { Naulakhi	1,10,149	...	1,10,149	1,659	296	1,11,504
... { Danbro	24,057	...	24,057	508	169	24,824
... { Dadwah	57,901	...	57,901	2,313	489	61,203
... { Renwah	31,169	...	31,169	268	138	31,575
... { Gharo Mahmuda	1,18,471	...	1,18,471	5,615	300	24,395
... { Kari Shumali	60,996	...	60,996	4,365	490	65,791
... { Nasirwah	54,387	...	54,387	871	331	55,589
... { Other Canal	61,587	...	61,587	899	254	62,740
	5,77,131	...	5,77,131	17,070	2,834	5,97,035

* The question of average revenue before improvements of this canal is under enquiry and investigation.

TABLE VI.A—continued.

Canals and Executive Districts.	Water share of net consolidated Revenue collected.	Deduct average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts, Raskals and Miscellaneous.	Receipts from Sales of Occupancy rights.	Total Direct and Indirect Receipts.
2	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
MINOR WORKS IRRIGATION AND NAVIGATION. WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.						
Canals in Operation—continued.						
Fuleli Canals ... { Other Canals	48,799	...	48,799	899	71	49,769
... { Hajipur Bund ... ..	.....	...	.....	...	...	.....
	48,799	...	48,799	899	71	49,769
Karachi Canals ... { Canals north of Kotri	17,578	...	17,578	751	146	18,475
... { Kalri	27,642	...	27,642	738	17	28,417
... { Baghar	53,577	...	53,577	1,302	32	55,011
... { Uchita	21,193	...	21,193	373	69	21,635
... { Canals in Tatta, &c.	16,465	...	16,465	1,031	11	17,507
... { Sual Canals	7,562	...	7,562	18	...	7,580
... { Pinyari	1,58,815	...	1,58,815	3,267	357	1,61,939
... { Canals in Mirpur Batoro	36,876	...	36,876	19	105	37,000
... { Canal in Sujawal	13,456	...	13,456	266	70	13,792
... { Satta	19,930	...	19,930	183	27	20,140
... { Canals in Jati	5,196	...	5,196	40	7	5,243
... { Khanta	12,780	...	12,780	81	10	12,871
... { Rokavari	32,338	...	32,338	753	41	33,147
... { Canals in Shahbandar	4,719	...	4,719	182	8	4,909
... { Bunds, left bank ... ..	.....	...	.....	255	...	255
... { Bunds, right bank ... ..	.....	...	.....	324	...	324
	4,27,742	...	4,27,742	9,603	900	4,38,245
Works Revenue Accounts only ...	21,05,760	...	21,05,760	59,360	8,438	21,73,558
AGRICULTURAL WORKS.						
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.						
In Operation.						
Begari Canals ... { Káshmor Bund	5,999	...	5,999	322	228	6,449
Shikarpur Canals ... { Kásimpur Bund ... ..	.....	...	.....	15	...	15
... { Sukkur Begari Bund ... ..	.....	...	.....	409	...	409
	.....	...	.....	424	...	424
Ghar Canal District ... { Ghar Bund ... ..	.....	...	.....	123	...	123
Western Nára ... { Nára Bund ... ..	.....	...	.....	33	...	33
Total, Agricultural Works	5,899	...	5,899	902	228	7,029
Add—Agricultural receipts ... ..	.....	...	.....	10	...	10
Total ...	5,899	...	5,899	912	228	7,039
Begari Canal District	3,03,180	24,876	2,78,324	24,433	6,514	3,09,271
Shikarpur Canal District	3,85,348	...	3,85,348	9,262	2,335	3,96,945
Ghar Canal District	9,32,811	1,88,382	7,44,429	13,454	2,431	7,60,314
Western Nára District	6,66,740	...	6,66,740	22,983	2,298	6,92,021
Eastern Nára District	4,17,954	3,444	4,14,510	20,441	64	4,35,015
Hyderabad Canal District	7,51,443	56,041	6,95,402	22,910	4,200	7,22,002
Fuleli Canal District	6,19,726	1,30,284	4,89,442	33,213	1,790	5,20,445
Karachi Canal District	4,27,742	...	4,27,742	9,603	900	4,38,245
Total	45,00,944	4,03,007	40,97,937	1,66,299	20,622	42,74,858
Note.—The figures in this statement are based on actual realization.						
Add—Agricultural receipts ...				10	...	10
Total ...				1,66,309	20,622	*42,74,868

Note.—The figures in this statement are based on actual realization.

Add—Agricultural receipts ...

Total ...

Add—Average before improvements ...

*42,74,868

4,03,007

46,77,875

Note.—Actual receipts on account of assessment on unauthorized cultivation.

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Superintending Engineer in Sind.

TABLE VII.

Area of Cultivation and consolidated Revenue for 1891-92.

Canals and Executive District.	CULTIVATION.			CONSOLIDATED REVENUE.			REMISSIONS.			Net Consolidated Revenue.	Irrigation share 90 per cent.	Land share 10 per cent.
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13
MAJOR WORKS.												
PRODUCTIVE WORK												
49. IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.												
<i>Canals in Operation.</i>												
Begri Canal District.	Desert Canal ...	25,389	6,438	31,777	53,303	13,179	65,482	42,872	3,496	46,368	10,114	17,203
	Unharwah ...	18,997	5,296	24,293	28,544	11,243	39,787	20,120	2,353	22,473	17,309	15,578
	Begri ...	108,929	57,487	166,416	2,30,460	1,00,158	3,30,618	25,658	12,859	38,517	3,65,111	2,72,739
		148,265	49,221	197,486	3,20,297	1,24,580	4,44,877	68,530	15,683	1,05,343	3,39,534	3,05,580
												33,954
Eastern Nara District.	Nara Supply Channel	94	3,317	3,411	510	9,182	9,692	...	...	9,692	8,723	969
	Eastern Nara ...	12,822	17,520	29,342	24,345	30,389	54,714	...	...	54,714	49,243	5,471
	Mithra Canal ...	86,283	90,177	176,460	2,16,531	67,015	2,83,546	...	...	2,83,546	2,53,212	25,154
	Dinwah ...	6,008	551	7,459	12,704	1,137	13,841	...	...	13,841	12,538	1,303
	Heranwah ...	2,006	947	2,953	5,262	770	6,032	...	...	6,032	5,429	603
	Khipra Canal ...	5,521	2,458	7,979	14,081	4,251	18,332	...	...	18,332	16,481	1,851
	Thar Canal ...	27,708	7,148	34,856	70,091	13,521	83,612	...	...	83,612	76,251	7,361
		142,887	62,118	204,955	3,37,994	1,36,245	4,74,239	...	...	4,74,239	4,17,817	46,422
		291,102	111,359	402,441	6,58,281	2,50,825	9,09,116	86,650	18,693	1,05,343	8,03,778	7,23,307
												80,876
43. MINOR WORKS IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.												
<i>Canals in Operation.</i>												
Ghar Canals	Sukkur Canal ...	53,087	34,016	87,103	1,40,271	1,03,655	2,43,926	...	2,218	2,43,926	2,17,708	24,178
	Ghar Canal ...	175,210	57,067	232,277	6,07,069	1,81,299	7,88,368	...	339	7,88,368	7,23,307	78,904
		228,297	91,083	319,380	7,47,340	2,84,954	10,32,344	...	2,557	10,32,344	9,28,510	1,02,977
Hyderabad Canals	Mehrabwah ...	11,712	1,456	13,168	23,798	3,183	26,971	...	...	26,971	24,274	2,697
	Abbar Kachari ...	9,160	90	9,250	18,121	207	18,328	...	...	18,328	16,993	1,335
	Marak ...	46,329	7-5	47,064	1,05,601	1,397	1,06,998	144	...	1,06,754	96,079	10,675
	Sarif ...	20,978	1,102	22,141	38,815	8,613	47,428	...	...	47,428	47,733	4,695
		88,180	3,443	91,623	1,85,725	5,400	1,91,125	144	...	1,91,125	1,74,583	16,542
Fuleli Canals	Fuleli ...	227,701	42,225	269,926	5,42,292	85,702	6,30,994	924	...	6,30,994	5,67,062	63,932
		544,778	136,751	681,529	14,78,377	3,79,098	18,57,463	1,068	2,557	3,625	18,53,838	1,68,433
												1,85,383
MINOR WORKS IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.												
<i>Canals in Operation.</i>												
Shikharpur Canals	Canals in Rohri ...	35,859	36,179	72,038	1,07,327	1,16,777	2,24,129	...	...	2,24,129	2,02,258	22,471
	Bunde in Rohri ...	45,009	15,477	60,486	1,07,327	48,225	2,05,462	1,965	95	2,06,427	1,88,051	20,341
	Sind Canal ...	83,988	51,638	135,626	2,65,209	1,65,002	4,30,211	1,965	95	4,30,211	3,88,339	42,812
		164,856	103,294	268,150	5,80,063	3,29,004	9,04,902	3,935	190	9,04,902	8,16,684	88,218
Western Nara	Nara ...	135,461	55,364	190,825	4,30,341	1,67,844	5,98,185	4,011	877	4,888	5,83,297	5,33,967
	Manchar ...	648	8,333	8,981	1,553	23,063	24,616	350	1,843	25,466	23,623	2,843
	Atal ...	1,972	6,096	8,068	4,308	20,325	25,193	...	107	25,300	23,577	2,723
	Pritchard Canal ...	3,604	4,469	8,073	10,412	13,811	24,223	20	17	24,196	21,767	2,429
	Wahur ...	4,422	1,982	6,404	11,284	6,729	17,013	5	...	17,018	15,908	1,110
	Mari ...	2,563	1,336	3,899	6,992	6,190	13,182	...	...	13,182	12,007	1,175
	Phita ...	5,635	2,707	8,342	15,585	8,516	24,101	...	...	24,101	21,986	2,115
	Dadd Canals ...	8,580	3,021	11,601	17,526	7,088	24,614	...	...	24,614	22,553	2,061
		162,575	83,728	246,303	4,85,061	2,53,096	7,48,157	4,419	2,941	7,360	7,40,797	6,66,716
												74,081
Hyderabad Canals	Nasrat ...	20,328	4,362	24,690	54,500	10,439	64,939	35	...	64,904	58,414	6,490
	Sadad ...	44,006	5,576	49,582	1,09,807	12,511	1,22,318	...	...	1,22,318	1,10,149	12,169
	Dambro ...	9,560	1,958	11,518	22,085	4,659	26,744	...	14	26,730	24,037	2,693
	Dadwah ...	75,418	4,570	80,000	152,188	12,137	164,325	...	...	164,325	148,188	16,137
	Reswar ...	16,530	3,337	19,867	39,149	1,423	40,572	...	...	40,572	37,126	3,446
	Gharo Mahmud ...	62,012	3,913	65,925	1,22,792	8,847	1,31,639	8	...	1,31,639	1,18,408	13,231
	Kari Shumali ...	25,803	1,322	27,125	55,073	2,422	57,495	106	...	57,495	52,066	5,429
	Nasirwah ...	25,040	1,328	26,368	55,049	8,322	63,371	43	...	63,371	57,048	6,323
	Other Canals ...	22,073	6,391	28,464	61,193	17,898	79,091	645	17	79,091	71,687	7,404
		241,732	29,187	270,919	5,67,446	74,819	6,42,265	837	31	6,42,265	5,76,200	66,065
Fuleli Canals District	Other Canals ...	18,503	1,412	19,915	40,684	4,881	54,565	344	...	54,565	48,799	5,766
	Haspur Bunde ...	...	...	...	...	...	...	...	...	...	...	...
		18,503	1,412	19,915	40,684	4,881	54,565	344	...	54,565	48,799	5,766

TABLE VII—continued.

Canals and Executive District.	CULTIVATION.			CONSOLIDATED REVENUE.			REMISSEMENTS.			Net-Consolidated Revenue.	Irrigation share 50 per cent.	Land share 10 per cent.
	Karif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Karif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13
MINOR WORKS IRRIGATION AND NAVIGATION.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.												
<i>Canals in Operation—continued.</i>												
Canals north of Kotri ...	4,758	2,256	7,550	12,203	7,539	19,132	82	...	82	19,050	17,683	1,965
Kalri ...	41,218	5,591	46,773	26,493	4,570	31,862	1,224	187	1,410	30,553	27,486	2,065
Baghan ...	16,531	6,492	23,826	44,143	16,591	60,437	1,706	7	1,703	59,234	53,311	5,923
Chilla ...	10,524	855	11,383	27,653	2,090	29,743	386	...	386	24,357	21,921	2,436
Canals in Tatta, &c. ...	7,702	1,470	9,165	78,272	3,474	81,746	4,945	510	2,411	39,323	17,347	1,985
Shal Canals ...	2,387	...	2,387	6,865	1,409	8,274	...	...	...	8,274	7,447	827
Piriyari ...	44,109	2,114	66,223	1,79,968	5,532	1,85,500	10,969	...	10,969	1,74,530	1,57,325	17,205
Canals in Mijgar ...	...	...	...	...	...	...	...	...	...	...	...	...
Karachi Canals ...	43,671	1,137	14,008	23,241	2,755	43,016	1,281	...	1,281	39,752	35,769	3,975
Canals in Sujawal ...	46,121	4,079	7,302	16,972	2,636	29,258	4,335	...	4,335	16,220	15,696	1,522
Satta ...	9,406	179	5,585	21,455	489	21,974	...	...	...	21,974	19,777	2,192
Canals in Jati ...	2,505	150	2,076	2791	392	3,184	...	49	...	5,356	4,883	554
Khanta ...	5,640	67	3,407	18,275	302	18,477	...	...	...	18,477	15,029	1,443
Kokowari ...	13,762	726	14,521	35,450	1,481	36,931	1,008	...	1,008	35,923	32,397	3,529
Canals in Shahbandar ...	1,953	51	2,034	5,079	164	5,243	...	...	...	6,243	5,719	524
Bunda, left bank ...	...	...	...	...	...	...	...	...	...	...	...	...
Bunda, right bank ...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Minor Works Revenue Accounts only	170,439	19,310	189,699	418,132	49,425	4,97,557	22,559	794	23,356	4,71,231	4,26,536	44,435
AGRICULTURAL WORKS.												
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.												
<i>In Operation.</i>												
Begari Canals ...	516	2,501	3,717	1,654	6,185	7,839	174	884	1,058	6,781	6,103	678
Shikarpur Canals ...	...	...	...	...	...	...	...	...	...	...	...	...
Ohio Canal districts ...	...	...	...	...	...	...	...	...	...	...	...	...
Western Nara ...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Agricultural Works	516	2,501	3,717	1,654	6,185	7,839	174	884	1,058	6,781	6,103	678
Begari Canal District ...	149,081	32,372	201,200	3,21,931	3,80,705	4,82,716	86,824	10,377	1,06,491	3,46,315	3,11,643	34,672
Shikarpur Canal District ...	33,468	51,474	125,521	2,64,309	1,54,922	4,30,111	1,984	93	2,080	4,28,151	3,83,330	42,821
Ghar Canal District ...	225,297	91,083	319,350	7,47,300	2,54,961	10,33,241	...	2,537	2,537	10,29,732	9,36,510	92,977
Western Nara District ...	161,572	33,728	246,603	4,95,061	2,53,956	7,38,157	4,416	2,941	7,309	7,40,799	6,66,616	74,061
Eastern Nara District ...	142,837	65,119	204,935	3,37,994	7,30,245	4,64,239	...	...	...	8,64,239	4,17,811	46,482
Hydrobold Canal District ...	229,912	23,529	365,512	7,35,150	52,719	8,35,869	981	31	1,012	8,34,857	7,01,529	81,433
Fuleli Canals District ...	216,504	43,637	299,341	5,91,976	90,554	6,85,559	1,268	...	1,268	6,84,291	6,01,561	68,450
Karachi Canals District ...	470,410	19,210	189,669	6,45,153	49,425	4,97,557	22,559	766	23,366	4,74,231	4,36,825	47,125
Total	3,512,333	456,181	4,019,717	29,63,883	11,52,819	31,16,672	1,18,007	23,864	1,43,964	30,01,708	25,02,341	5,00,267

Note.—The figures in this statement are based on assessment.

Add assessment on unauthorized cultivation.

* 42,02,411

... 52,333

42,51,074

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TABLE VII-A.

Comparative Statement showing Increases or Decreases under heads Kharif and Rabi and Irrigation share of net consolidated Assessment for 1890-91 and 1891-92.

Canals and Executive.	1890-91.			1891-92.			Results.			
	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	
	Kharif.	Rabi.		Kharif.	Rabi.		Kharif.	Rabi.		
1	2	3	4	5	6	7	8	9	10	
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	
MAJOR WORKS.										
PRODUCTIVE WORKS.										
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.										
Canals in Operation.										
Begri Canal District ..	(Desert Canal	77,594	4,074	1,46,916	25,330	6,438	17,903	-52,255	+2,364	-1,29,713
	(Unharwah	17,596	2,824	37,399	13,997	5,296	15,574	-3,899	+2,462	-21,821
	(Begri	102,629	15,009	2,33,411	1,08,929	57,497	2,72,799	+6,300	+21,888	+89,362
		198,089	22,507	4,87,726	1,48,265	49,221	3,05,580	-49,624	+20,714	-1,12,146
	(Nara Supply Canal	108	5,933	15,143	94	3,317	8,723	-14	-2,618	-8,420
	(Eastern Nara	13,504	36,587	67,796	13,322	17,320	40,243	-1,182	-10,067	-12,515
	(Mithran Canal	91,083	19,478	2,33,543	88,283	30,777	2,54,212	-2,801	+11,260	+19,699
Eastern Nara District ..	(Dinwah	6,739	538	13,232	6,908	551	12,833	+16	+18	-694
	(Hiranwah	2,100	240	4,651	2,306	347	5,420	+261	+107	+773
	(Khipra Canal	7,023	2,250	14,954	5,221	2,455	18,421	-1,892	+298	-1,583
	(Thar Canal	34,038	9,139	84,940	27,703	7,148	75,251	-6,935	+3,969	-9,695
		155,200	68,172	4,34,255	142,887	62,118	3,63,363	-6,661		-16,438
Total, Major Works ..		553,289	96,679	8,51,981	291,102	111,639	1,53,207	-62,187	+20,860	-1,28,584
43.—MINOR WORKS IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE SEPT.										
Canals in Operation.										
Ghar Canal ..	(Sukkur Canal	58,140	27,314	2,11,811	53,087	34,026	2,17,565	-5,053	+6,502	+5,954
	(Ghar Canal	179,967	53,029	7,00,434	175,219	57,067	7,09,246	-4,757	+4,038	+5,511
		238,107	80,243	9,12,945	228,297	91,093	9,26,810	-0,810	+10,840	+14,765
	(Mehrabwah	11,714	1,296	24,043	11,712	1,456	24,574	-2	+160	+231
	(Alibhar Kacheri	7,969	87	16,396	9,160	90	15,895	+1,101	+3	+99
Hyderabad Canals ..	(Marak	41,417	800	92,970	40,329	735	90,079	+4,912	-35	+3,109
	(Sarfaraz	21,141	1,448	39,351	20,978	1,162	37,733	-162	-286	-1,618
		82,241	3,661	1,72,700	88,180	3,443	1,74,583	+5,939	-218	+1,823
Fuleh Canal District: Fuleh ..		236,444	41,090	5,90,018	227,701	42,235	5,67,062	-5,743	+1,135	-22,956
Total, Minor Works: Capital and Revenue Accounts ..		556,792	124,994	16,74,822	544,178	136,751	16,68,455	-12,614	-11,757	-6,388
MINOR WORKS IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE SEPT.										
Canals in Operation.										
Shikarpur Canal ..	(Canals in Rohri	43,258	16,345	1,62,827	35,850	36,179	2,02,258	-7,399	+19,834	+39,631
	(Bunds in Rohri									
	(Sind Canal	50,167	11,571	1,76,366	48,069	15,477	1,53,081	-2,168	+3,906	+6,715
		93,425	27,916	3,38,993	83,868	51,656	3,55,339	-9,557	+23,740	+46,346
	(Nara	132,509	53,470	5,32,157	135,461	55,364	5,33,967	+3,912	+1,594	+1,810
	(Manchar						30,496	+648	+6,339	+20,406
	(Aral						6,306	+1,972	+6,206	+22,577
	(Pritchard Canal	1,832	1,145	7,790	3,604	4,469	21,767	+1,742	+3,324	+13,977
Western Nara District ..	(Wahur	4,425	1,760	15,256	4,422	1,983	15,597	+371	+232	+21
	(Marsi	3,486	1,729	11,987	2,363	1,638	11,793	+178	-31	+408
	(Phitta	5,103	1,882	15,733	5,625	2,709	18,744	+316	+537	+2,991
	(Dadu Canals	7,978	2,761	19,416	8,550	3,021	22,139	+601	+930	+2,737
		154,310	62,747	6,01,768	162,875	83,728	6,66,710	+8,565	+20,951	+64,479

TABLE: VII-A—continued.

[illegible]

Note.—The figures in this statement are based on assessments.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VII-B.

Statement showing receipts from sale of occupancy rights in waste or other lands not belonging to Major and Minor Works, but directly benefited by their construction for the year 1891-92.

Canals and Executive District.		Particulars of the Lands, the Occupancy Rights of which were sold.				Amount of Receipts from Sale of Occupancy Rights.	Land Share 1/10.	Irrigation Share 9/10.	Sums to be credited as Indirect Revenue calculated at 4 per cent. on Irrigation share.	REMARKS.
		Taluka.	Village.	Area.	Assessment.					
1	2	3	4	5	6	7	8	9	10	11
MAJOR WORKS.										
PRODUCTIVE WORKS.										
42.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.										
<i>Canals in Operation.</i>										
Begari Canal District	Desert Canal	..	..	..	..	..	..	..	..	..
	Dularwah	..	..	..	..	..	..	..	..	..
	Begari	..	..	..	..	..	..	..	..	..
				Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	
				10	..	5	1	4	..	
				585	..	1,689	168	16.21	..	61
				605	..	1,664	169	1,525	..	61
Eastern Nara District	Nara Supply Channel	..	..	..	..	..	..	..	..	..
	Eastern Nara	..	..	..	..	..	..	..	..	..
	Mithran Canal	..	..	..	..	..	..	..	..	..
	Dinawan	..	..	..	..	..	..	..	..	..
	Heranwah	..	..	..	..	..	..	..	..	..
				8	17	2	..	..	..	..
				..	..	..	..	..	..	..
				..	..	..	..	..	..	..
				..	..	..	..	..	..	..
				..	..	..	..	..	..	..
				902	301	623	62	561	..	22
				1,597	301	2,317	..	..	..	83
43.—MINOR WORKS, IRRIGATION AND NAVIGATION										
<i>WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.</i>										
<i>Canals in Operation.</i>										
Ghar Canals	Sukkur Canal	..	..	..	..	..	..	..	..	..
	Ghar Canals	..	..	..	..	..	..	..	..	..
				223	..	1,547	157	1,410	..	56
				6,649	..	15,487	2,548	22,639	..	915
				6,878	..	27,054	2,705	24,349	..	974
Hyderabad Canals	Mehrahwah	..	..	..	..	..	..	..	..	..
	Alibhar Kacheri	..	..	..	..	..	..	..	..	..
	Marak	..	..	..	..	..	..	..	..	..
	Saffraz	..	..	..	..	..	..	..	..	..
				129	317	317	32	285	..	11
				822	1,748	1,760	117	1,559	..	63
				3,374	7,761	7,763	776	6,989	..	280
				1,901	2,859	3,081	308	2,773	..	111
				6,226	12,685	12,923	1,293	11,636	..	465
Fuleli Canals	Fuleli	..	..	..	..	..	..	..	..	..
				8,574	13,836	17,896	1,789	16,107	..	644
Total, Minor Works Capital and Revenue Accounts ..										
				21,678	20,521	57,879	5,787	52,092	..	2,083
MINOR WORKS, IRRIGATION AND NAVIGATION.										
<i>WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.</i>										
<i>Canals in Operation.</i>										
Shikarpur Canals	Canals in Rohri	..	..	..	..	..	..	..	..	..
	Bunde in Rohri	..	..	..	..	..	..	..	..	..
	Sind Canal	..	..	..	..	..	..	..	..	..
				2,093	..	18,530	1,853	16,677	..	667
				1,071	..	5,368	537	4,831	..	193
				3,164	..	23,898	2,390	21,508	..	660
Western Nara District	Nara	..	..	..	..	..	..	..	..	..
	Pitchard Canal	..	..	..	..	..	..	..	..	..
	Wahur	..	..	..	..	..	..	..	..	..
	Marvi	..	..	..	..	..	..	..	..	..
	Phutta	..	..	..	..	..	..	..	..	..
	Dadu Canals	..	..	..	..	..	..	..	..	..
				4,526	4,754	13,730	1,372	12,358	..	494
				1,354	..	7,718	772	6,946	..	275
				52	..	263	27	236	..	9
				337	113	1,664	166	1,498	..	60
				909	2,092	3,531	353	3,178	..	127
				909	1,754	3,822	382	3,440	..	135
				2,237	8,713	30,718	3,072	27,646	..	1,105

TABLE VII-B.—*continued.*

Canals and Executive District.		Particulars of the Lands, the Occupancy Rights of which were sold.				Amount of Receipts from Sale of Occupancy Rights.	Land Share 1/10.	Irrigation Share 9/10.	Sum to be credited as Indirect Revenue calculated at 4 per cent. on Irrigation share.	REMARKS.
		Tsiluka.	Village.	Area.	Assessment.					
1	2	3	4	5	6	7	8	9	10	11
				Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	
Hydrabad Canals	(Nasrūt			1,414	3,407	3,718	373	3,346	334	
	(Naolakhī			651	1,285	1,375	157	1,218	57	
	(Dambro			407	472	1,103	110	993	40	
	(Dadwah			3,785	6,586	7,010	791	7,119	263	
	(Rauwāt			383	568	1,021	42	979	18	
	(Gharo Mahmūd			1,497	3,320	3,000	360	2,700	108	
	(Kari Shumail			1,706	3,449	3,869	387	3,482	129	
	(Nasirūdī			2,884	5,702	5,618	563	5,055	202	
	(Other Canals			1,284	2,377	2,859	286	2,573	103	
				13,671	25,983	30,173	3,017	27,156	1,066	
Fulhi Canals	(Other Canals			410	999	1,619	162	1,457	58	
	(Hajipur Bund			..	..	..	..	..	..	
				410	999	1,619	162	1,457	58	
Karachi Canals	(Canals north of Kotri			46	138	109	11	98	4	
	(Kabri			314	715	123	13	116	5	
	(Boghar			1,453	3,757	332	33	369	13	
	(Uchitta			731	1,906	1,155	118	1,042	42	
	(Canals in Jatta			163	385	123	12	111	4	
	(Mirpur Batoro			5	12	2	..	2	..	
	(Mirpur Batoro			268	2,308	2,615	263	2,352	96	
	(Sutia			87	113	723	73	655	26	
	(Canals in Jati			98	294	618	65	553	23	
	(Kokowari			..	..	31	3	28	1	
	(Khanra			..	..	245	24	222	9	
	(Canals in Shāhbandar			..	..	866	87	779	31	
	(Bunds, left bank			19	57	153	15	138	6	
	(Bunds, right bank			..	..	..	..	..	..	
Total, Minor Works Revenue Accounts only				3,975	10,540	7,882	739	7,103	284	
AGRICULTURAL WORKS.										
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.										
Canals in Operation.										
Begār Canals District	..	..	..	181	..	222	22	200	8	
Shikarpur Canal District	(Kāmpur Bund			..	..	..	..	..	..	
	(Sukkur Begār Bund			..	..	..	..	..	..	
Total, Agricultural Works				181	..	222	22	200	8	
Abstract for each canal district under all heads.										
Begār Canals District	..	..	..	788	..	1,916	192	1,724	69	
Shikarpur Canals District	..	..	..	3,161	..	23,398	2,391	21,007	869	
Ghar Canal	..	..	..	6,573	..	27,354	2,705	24,649	974	
Western Nara	..	..	..	8,237	..	30,719	3,012	27,707	1,106	
Eastern Nara	..	..	..	362	..	301	32	269	11	
Hydrabad Canals District	..	..	..	19,897	..	78,670	43,102	4,319	38,782	1,582
Fulhi Canals	..	..	..	8,096	..	14,835	1,515	1,951	17,644	702
Karachi Canal	..	..	..	3,975	..	10,540	1,892	739	7,103	284
Total				52,913	73,069	154,718	15,471	139,247	5,569	

Notes.—(1). The figures in this statement are actual receipts.

(2). Columns 3 and 4 could not be filled in as the Tsilukas and villages are too numerous to mention.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

TABLE VIII.
CROP RETURN
FOR
FIVE YEARS ENDING
1891-92.
(SIND.)

Canals.	Years	KHARIF.								
		CLASS OF								
		Rice.			Jowari.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Desert Canal...	1887-88 ...	...	281	381	2,809	29,833	32,642	281	5,567	5,848
	1888-89 ...	...	186	186	3,374	34,508	37,882	174	6,066	6,240
	1889-90 ...	...	301	301	5,332	53,199	57,531	480	6,415	6,895
	1890-91 ...	...	541	541	7,421	53,104	60,525	786	7,645	8,331
	1891-92 ...	...	254	254	2,692	16,320	19,012	583	1,676	2,259
Unharwah ...	1887-88 ...	...	100	100	2,372	13,853	16,125	283	6,203	6,486
	1888-89 ...	...	158	158	3,323	18,687	22,010	225	2,056	2,281
	1889-90 ...	...	382	382	4,339	18,710	23,049	613	2,447	3,060
	1890-91 ...	...	192	192	2,147	7,873	10,020	975	4,525	5,500
	1891-92 ...	...	673	673	1,186	5,688	6,874	865	2,755	3,620
Begari Canal...	1887-88 ...	...	8,668	8,668	12,551	53,423	65,975	1,049	4,095	5,144
	1888-89 ...	...	6,984	6,984	17,640	58,142	75,782	847	4,593	5,440
	1889-90 ...	...	10,670	10,670	19,546	65,928	85,474	1,641	5,210	6,751
	1890-91 ...	...	4,414	4,414	16,084	46,838	62,922	2,812	9,582	12,394
	1891-92 ...	...	5,481	5,481	11,615	43,849	55,464	2,748	7,777	10,525
Kashmor Bund.	1887-88 ...	...	78	78	...	541	541	...	55	55
	1888-89 ...	...	7	7	6	800	806	...	66	66
	1889-90 ...	...	31	31	4	1,526	1,530	...	121	121
	1890-91 ...	...	16	16	1	330	331	2	305	307
	1891-92 ...	...	...	...	9	111	120	17	29	46
Canals in Rohri.	1887-88 ...	...	6,702	6,702	15,402	23,336	39,338	1,093	1,573	2,666
	1888-89 ...	...	5,592	5,592	20,346	24,056	44,402	1,259	1,657	2,815
	1889-90 ...	5	9,189	9,194	13,743	25,454	39,197	1,444	4,509	5,953
	1890-91 ...	18	11,391	11,409	6,927	20,585	27,492	684	1,654	2,338
	1891-92 ...	...	9,090	9,090	7,355	16,414	23,769	296	1,055	1,351
Sind Canals ...	1887-88 ...	...	21,236	21,236	9,765	7,975	17,740	272	215	487
	1888-89 ...	...	20,369	20,369	10,576	12,002	22,578	114	192	306
	1889-90 ...	2	21,276	21,278	11,968	16,825	28,823	242	266	508
	1890-91 ...	...	22,255	22,255	11,784	11,337	23,121	535	331	866
	1891-92 ...	...	22,974	22,974	9,716	10,645	20,361	357	180	537
Fukkur Canal	1887-88 ...	1	26,584	26,585	6,432	10,966	17,418	62	341	403
	1888-89 ...	...	24,454	24,454	6,579	14,602	21,481	112	346	458
	1889-90 ...	...	27,173	27,173	7,515	15,923	23,238	344	568	912
	1890-91 ...	8	29,612	29,620	6,332	12,081	18,413	621	1,026	1,647
	1891-92 ...	...	26,894	26,894	4,661	10,453	15,114	414	302	616
Ghas Canals ...	1887-88 ...	16	45,524	45,540	3,986	77,103	81,089	433	8,824	2,257
	1888-89 ...	...	60,169	60,169	3,767	86,228	89,995	255	4,024	4,279
	1889-90 ...	...	97,676	97,676	2,899	67,128	70,027	227	3,322	3,549
	1890-91 ...	...	129,785	129,785	2,540	40,161	42,701	547	3,820	4,367
	1891-92 ...	...	132,542	132,542	1,922	35,371	37,193	226	898	1,124
Bunds, R. Bank	1887-88 ...	...	...	...	...	58	58	...	3	3
	1888-89 ...	...	...	...	...	29	29	...	...	...
	1889-90 ...	...	...	...	...	...	...	...	...	...
	1890-91 ...	...	...	...	...	...	...	...	...	...
	1891-92 ...	...	...	...	...	...	...	...	...	...
Western Nara	1887-88 ...	...	65,506	65,506	16,179	48,103	64,282	2,257	4,372	7,129
	1888-89 ...	8	75,599	75,607	24,091	38,467	62,558	1,262	1,651	2,913
	1889-90 ...	31	67,521	67,555	25,831	63,183	89,014	1,011	2,403	3,414
	1890-91 ...	42	71,767	71,809	20,663	35,232	55,895	2,164	1,570	3,734
	1891-92 ...	10	63,068	63,078	24,787	43,460	68,247	1,023	1,408	2,431
Pritchard Canal	1887-88 ...	...	...	...	...	...	...	...	...	...
	1888-89 ...	...	...	...	...	...	...	...	...	...
	1889-90 ...	...	...	...	...	...	...	...	...	...
	1890-91 ...	...	...	...	...	...	...	...	...	...
	1891-92 ...	...	196	196	342	2,737	3,279	50	57	107
Wahur	1887-88 ...	...	44	44	1,309	2,847	4,156	657	394	1,051
	1888-89 ...	...	260	260	1,654	2,701	4,355	310	307	617
	1889-90 ...	...	259	259	1,410	3,388	4,798	208	365	573
	1890-91 ...	...	8	8	1,066	2,494	3,560	404	403	807
	1891-92 ...	...	17	17	2,325	1,804	4,129	76	160	236
Marvi ...	1887-88 ...	...	38	38	1,973	474	2,447	20	47	67
	1888-89 ...	...	61	61	2,274	678	2,952	22	26	48
	1889-90 ...	...	105	105	2,215	471	2,687	130	12	142
	1890-91 ...	...	57	57	1,677	583	2,260	52	8	60
	1891-92 ...	...	195	195	1,684	625	2,309	20	7	27

Cgors.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	11	11	134	8,043	8,177	3,224	43,835	47,059
...	33	33	196	18,047	18,243	3,744	58,840	62,584
...	40	40	275	12,298	12,573	6,087	71,253	77,340
...	55	55	103	8,039	8,142	8,310	69,284	77,594
3	59	62	108	3,644	3,752	3,386	21,953	25,339
...	11	11	134	8,043	8,177	3,224	43,835	47,059
...	74	74	621	13,191	13,812	4,169	34,166	38,335
...	138	138	446	5,195	5,641	5,398	26,872	32,270
2	109	111	155	1,888	2,043	3,279	14,587	17,866
7	34	41	173	2,617	2,790	2,231	11,767	13,998
4	244	248	4,227	36,211	40,438	17,831	1,02,641	1,20,472
17	268	285	5,094	53,909	59,003	23,598	1,28,896	1,47,494
3	389	592	2,427	30,486	32,913	23,517	1,12,633	1,36,150
2	245	247	1,311	21,341	22,652	20,209	82,420	1,02,623
5	400	405	1,616	35,439	37,055	15,984	92,946	1,08,930
1	450	451	1	6	7	2	1,130	1,132
...	378	378	...	57	57	6	1,308	1,314
5	612	617	...	298	298	9	2,588	2,597
...	267	267	...	409	409	3	1,327	1,330
6	250	256	3	392	395	35	782	817
267	792	1,059	276	2,338	3,214	17,038	35,941	52,979
378	705	1,083	460	3,767	4,227	22,842	38,677	61,119
187	590	847	127	3,390	3,717	15,506	43,402	58,908
...	...	...	...	1,155	1,218	7,774	35,484	43,258
...	...	...	127	1,037	1,184	8,009	27,850	35,859
57	79	136	1,524	3,358	4,882	11,618	32,863	44,481
54	111	165	984	5,431	6,415	11,728	33,105	49,833
31	148	179	744	4,643	5,387	13,017	43,158	56,176
41	117	158	881	2,886	3,767	13,241	36,926	50,167
33	124	157	597	3,083	3,930	11,003	37,006	48,009
26	160	186	2,255	8,341	10,596	8,776	46,412	55,188
17	139	156	3,231	14,623	17,873	10,259	54,163	64,422
53	324	357	1,844	10,362	12,206	9,586	54,350	63,836
55	156	211	1,405	6,844	8,249	8,421	49,719	58,140
55	247	302	1,645	8,518	10,163	6,675	46,414	53,089
75	353	428	700	11,754	12,454	5,210	1,43,558	1,48,768
100	397	497	829	21,444	22,273	4,951	1,72,262	1,77,213
32	339	371	394	5,014	5,408	3,552	1,73,479	1,77,031
28	210	238	328	2,548	2,876	3,443	1,76,524	1,79,967
67	384	451	312	3,589	3,901	2,527	1,72,684	1,75,211
...	...	...	...	2	2	...	63	63
...	...	...	...	...	...	...	29	29
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
186	224	410	1,051	2,623	3,674	19,673	1,21,328	1,41,001
218	240	458	1,042	13,716	14,758	26,621	1,29,673	1,56,294
116	236	352	525	3,151	3,676	27,514	1,36,497	1,64,011
205	160	365	280	2,308	2,588	23,354	1,11,037	1,34,391
473	173	646	701	2,331	3,032	26,993	1,10,440	1,37,433
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
3	13	16	3	3	6	598	3,006	3,604
33	15	48	42	45	87	2,041	3,345	5,386
166	36	202	23	48	71	2,153	3,352	5,505
14	30	44	5	34	39	1,637	4,076	5,713
5	26	31	8	12	20	1,483	2,943	4,426
4	21	25	11	4	15	2,416	2,006	4,422
...	1	1	1	25	26	1,994	585	2,579
...	1	1	20	24	44	2,316	790	3,106
3	...	3	50	4	54	2,399	592	2,991
2	1	3	14	11	25	1,745	660	2,405
4	4	8	9	15	24	1,717	846	2,563

RABL.

Class of

Wheat.			Barley.			Oil seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	2,364	2,364	...	12	12	...	639	639
...	3,394	3,394	...	9	9	...	3,131	3,131
...	4,575	4,575	...	10	10	1	926	927
...	2,840	2,840	...	6	6	...	1,194	1,194
8	4,039	4,047	...	16	16	59	6,637	6,696
...	1,133	1,133	...	1	1	...	768	768
...	1,862	1,862	...	10	10	38	3,709	3,747
...	1,450	1,450	...	3	3	...	145	145
3	1,669	1,669	...	8	8	...	1,062	1,062
58	4,110	4,168	...	55	55	49	2,847	2,896
9	917	926	2	19	21	548	3,887	4,435
88	1,725	1,813	33	89	122	2,620	7,675	10,295
3	729	732	12	20	32	59	2,839	2,898
31	3,360	3,391	40	261	301	133	5,312	5,445
463	10,156	10,619	45	282	327	1,890	25,910	30,800
3	2,519	2,522	...	17	17	...	41	41
...	2,121	2,121	...	32	32	...	49	49
...	2,603	2,603	...	16	16	...	182	182
...	2,945	2,945	...	52	52	...	70	70
15	2,764	2,779	7	37	44	...	26	26
342	21,765	22,107	7	85	92	36	299	335
806	18,404	19,210	26	56	82	3	735	738
678	10,797	11,475	2	30	32	167	1,567	1,734
215	14,452	14,607	25	84	109	41	70	70
1,938	32,074	34,012	19	130	149	40	56	56
785	2,011	2,796	...	4	4	10	148	158
286	3,180	3,466	6	10	16	38	530	568
278	5,643	5,921	9	28	37	68	259	327
263	7,134	7,397	10	25	35	61	2,202	2,263
431	12,568	12,999	14	96	110	67	445	512
2,949	10,885	13,834	35	39	74	314	766	1,030
6,875	8,568	15,443	28	79	107	633	1,716	2,349
6,175	15,010	21,185	64	150	214	581	1,703	2,284
2,620	17,812	20,432	22	132	154	335	4,970	5,305
6,135	24,336	30,531	46	297	343	986	2,561	3,547
2,345	7,435	9,830	16	60	76	39	2,156	2,685
358	16,019	16,377	11	88	99	12	6,711	6,723
415	25,546	25,961	5	497	502	90	18,850	18,940
405	30,407	30,812	4	954	958	89	17,932	17,171
1,095	39,932	41,028	22	290	321	125	12,249	12,374
...	46	46	...	...	...	...	...	...
...	24	24	...	...	...	...	...	...
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6,997	23,703	30,700	137	605	742	584	5,287	5,871
4,536	19,539	24,075	173	297	470	493	2,547	3,040
7,593	31,578	39,171	225	721	946	798	8,513	9,311
16,907	17,554	34,461	1,506	1,616	2,522	1,674	9,318	10,992
13,345	29,446	42,791	486	804	1,290	647	12,877	13,524
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
150	1,621	1,171	39	167	206	8	2,987	2,995
3	984	987	...	19	19	...	99	99
2	471	473	2	7	9	1	17	18
14	690	704	...	5	5	12	205	217
4	1,236	1,240	1	23	24	...	382	382
146	1,469	1,615	1	59	60	1	280	281
610	437	1,047	7	48	55	...	7	7
651	211	862	16	92	108	...	17	17
716	162	878	8	47	55	5	177	182
191	981	1,172	22	55	77	4	473	477
184	925	1,109	15	102	117	1	392	393

RETURN.

CROPS.						Total Cultivation.			Remarks.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
...	33	33	...	3,048	3,048	3,224	46,883	50,107	
...	84	84	...	6,618	6,618	3,744	65,458	69,202	
...	80	80	1	5,591	5,592	6,088	76,844	82,932	
...	34	34	...	4,074	4,074	8,310	73,358	81,668	
...	359	359	67	11,051	11,118	3,453	33,004	36,437	
...	...	...	...	1,902	1,902	2,936	26,571	29,507	
...	22	22	38	5,603	5,641	4,207	39,769	43,976	
...	7	7	...	1,605	1,605	5,398	28,477	33,875	
1	84	85	1	2,823	2,824	3,280	17,410	20,690	
3	729	732	110	7,741	7,851	2,341	19,508	21,849	
1	382	382	560	5,205	5,765	18,391	1,07,846	1,26,237	
66	3,474	3,510	2,507	12,963	15,770	26,405	1,36,859	1,63,264	
61	1,690	1,721	135	5,248	5,383	23,652	1,17,881	1,41,533	
58	6,414	6,472	262	15,347	16,609	20,471	97,767	1,18,238	
70	8,722	8,792	2,468	48,070	60,533	18,482	1,41,016	1,59,468	
...	128	128	3	2,705	2,708	5	3,835	3,840	
...	110	110	...	2,312	2,312	6	3,620	3,626	
...	112	112	...	2,913	2,913	9	5,501	5,510	
1	161	162	1	3,228	3,229	4	4,555	4,559	
3	230	233	25	3,057	3,082	60	3,839	3,899	
19	1,102	1,121	404	23,251	23,656	17,442	59,192	76,634	
55	874	929	890	20,069	20,969	23,332	58,746	82,078	
62	48	49	909	12,881	13,790	16,415	56,283	72,698	
36	1,102	1,102	297	16,048	16,345	8,871	51,532	59,663	
35	...	...	2,035	34,144	36,179	10,044	61,994	72,038	
141	1,332	1,473	936	3,495	4,431	12,554	36,358	48,912	
327	845	1,172	657	4,565	5,222	12,385	42,670	55,055	
266	919	1,135	621	6,849	7,470	13,638	50,007	63,645	
205	1,671	1,876	539	11,032	11,571	13,780	47,958	61,738	
275	1,631	1,909	787	14,743	15,530	11,790	51,749	63,539	
38	507	545	3,336	12,197	15,533	12,112	58,609	70,721	
346	1,106	1,452	7,882	11,469	19,351	18,141	65,632	83,773	
205	1,923	2,128	7,025	18,786	25,811	16,561	73,136	89,697	
101	1,222	1,328	3,078	21,136	27,214	11,499	73,855	95,354	
157	1,980	2,137	7,354	29,174	36,558	14,059	75,588	89,647	
413	1,188	1,601	2,813	11,379	14,192	8,023	1,54,937	1,62,960	
23	3,953	3,976	404	26,771	27,175	5,355	1,99,033	2,04,388	
36	5,075	5,111	546	49,968	50,514	4,098	2,23,447	2,27,545	
18	4,070	4,088	516	52,513	53,029	3,959	2,29,037	2,32,996	
148	5,307	5,455	1,390	57,788	59,178	3,917	2,30,472	2,34,389	
...	4	4	...	50	50	...	113	113	
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58	4,593	4,651	7,776	34,183	41,964	27,449	1,55,516	1,82,965	
614	2,741	3,355	5,816	25,124	30,940	32,437	1,54,797	1,87,234	
644	8,000	8,644	9,260	48,812	58,072	36,774	1,85,309	2,22,083	
1,382	5,238	6,640	21,469	33,146	54,615	44,823	1,44,183	1,89,006	
910	3,036	3,966	15,388	46,182	61,570	42,381	1,56,622	1,99,003*	
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...	97	97	197	4,272	4,469	795	7,278	8,073	
...	28	28	3	1,130	1,133	2,044	4,475	6,519	
37	124	161	42	619	661	2,195	3,971	6,166	
18	70	88	44	970	1,014	1,681	5,046	6,727	
...	114	114	5	1,755	1,760	1,488	4,698	6,186	
2	24	26	150	1,832	1,982	2,566	3,838	6,404	
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...	97	97	197	4,272	4,469	795	7,278	8,073	
...	28	28	3	1,130	1,133	2,044	4,475	6,519	
37	124	161	42	619	661	2,195	3,971	6,166	
18	70	88	44	970	1,014	1,681	5,046	6,727	
...	114	114	5	1,755	1,760	1,488	4,698	6,186	
2	24	26	150	1,832	1,982	2,566	3,838	6,404	
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Add Marchant... 1,96,000
8,687
2,07,990

Canals.	Years.	KHARIF.								
		CLASS OF								
		Rice.			Jowari.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Phitta ...	1887-88 ...	...	255	255	1,988	1,233	3,221	115	...	115
	1888-89 ...	1	234	235	...	3,859	32	3,891	91	91
	1889-90 ...	...	281	281	3,372	48	3,420	153	...	153
	1890-91 ...	...	539	539	2,977	1,336	4,313	191	...	191
	1891-92 ...	...	566	566	4,792	48	4,840	181	...	181
Nāra South Channel ...	1887-88 ...	...	...	...	487	5	492	...	23	23
	1888-89 ...	...	3	3	845	...	845	26	...	26
	1889-90 ...	1	...	1	270	15	285	2	69	71
	1890-91 ...	...	...	...	58	18	76	2	...	2
	1891-92 ...	1	...	1	48	...	48	2	...	2
Eastern Nāra ...	1887-88 ...	...	3,305	3,305	...	56	56	61	12,229	12,310
	1888-89 ...	...	4,636	4,636	3	21	24	283	22,605	22,893
	1889-90 ...	...	5,266	5,266	1	7	8	264	12,555	12,819
	1890-91 ...	...	5,795	5,795	10	26	36	355	6,709	6,064
	1891-92 ...	...	4,676	4,676	6	38	44	348	4,114	4,462
Mithrau ...	1887-88 ...	3	54,850	54,853	239	148	387	6,565	9,226	15,761
	1888-89 ...	...	56,620	56,620	420	122	542	8,239	9,293	17,532
	1889-90 ...	...	58,369	58,369	286	306	592	12,788	7,583	20,371
	1890-91 ...	...	49,729	49,729	339	93	432	14,661	4,583	19,244
	1891-92 ...	...	53,182	53,182	351	63	414	13,336	3,963	17,299
Dimwāh ...	1887-88 ...	...	...	...	48	...	48	957	566	1,823
	1888-89 ...	...	...	...	91	3	94	501	766	1,567
	1889-90 ...	...	73	73	214	105	319	501	2,068	4,056
	1890-91 ...	...	...	...	147	106	253	...	...	4,122
	1891-92 ...	...	4	4	204	84	288	...	...	4,229
Herānwāh ...	1887-88 ...	...	...	...	64	3	67	487	280	767
	1888-89 ...	...	...	...	155	6	161	677	319	996
	1889-90 ...	...	101	101	10	...	10	853	122	975
	1890-91 ...	...	...	...	70	5	78	829	290	1,119
	1891-92 ...	...	116	116	93	5	98	978	228	1,206
Khipra ...	1887-88 ...	...	...	...	...	...	...	...	...	...
	1888-89 ...	...	...	...	...	...	...	...	...	...
	1889-90 ...	...	...	...	23	...	23	457	3,342	3,799
	1890-91 ...	...	159	159	8	24	32	227	5,285	5,512
	1891-92 ...	...	173	173	...	...	...	304	3,185	3,489
Thar Canal ...	1887-88 ...	...	20,082	20,082	10	19	29	126	1,610	1,736
	1888-89 ...	...	24,996	24,996	12	2	14	501	5,152	5,653
	1889-90 ...	...	25,827	25,827	7	...	7	2,333	3,964	6,287
	1890-91 ...	...	24,382	24,382	205	18	223	2,011	1,420	3,431
	1891-92 ...	...	22,316	22,316	6	2	8	1,110	553	1,663
Mehrabwāh ...	1887-88 ...	15	41	56	7,830	416	8,246	2,232	93	2,325
	1888-89 ...	...	27	27	8,637	232	8,869	2,284	16	2,280
	1889-90 ...	...	49	49	7,618	466	8,084	2,318	61	2,869
	1890-91 ...	...	71	71	6,626	220	6,846	2,241	59	3,000
	1891-92 ...	...	50	50	6,736	432	7,168	2,540	62	2,602
Nasrat ...	1887-88 ...	3	98	101	8,142	3,648	11,790	1,234	209	1,443
	1888-89 ...	3	158	161	11,220	3,434	14,654	775	85	860
	1889-90 ...	...	228	228	11,215	3,843	15,058	1,335	99	1,434
	1890-91 ...	9	303	312	10,215	3,487	13,702	1,688	178	1,866
	1891-92 ...	1	293	294	10,833	4,041	14,874	1,248	147	1,395
Naolakhī ...	1887-88 ...	10	334	344	20,592	6,212	26,804	4,665	333	5,000
	1888-89 ...	21	367	378	22,146	5,313	27,459	4,153	275	4,423
	1889-90 ...	12	348	360	23,610	6,625	30,235	4,388	338	4,726
	1890-91 ...	4	452	456	19,714	7,431	27,145	5,590	328	6,418
	1891-92 ...	13	401	414	21,280	6,758	28,038	4,643	516	5,159
Dambrō ...	1887-88 ...	1	...	1	3,745	277	4,022	1,533	44	1,597
	1888-89 ...	...	17	17	4,460	401	4,861	1,120	74	1,194
	1889-90 ...	...	14	14	6,137	541	6,678	1,516	87	1,603
	1890-91 ...	...	17	17	5,555	476	6,031	2,393	126	2,719
	1891-92 ...	20	47	67	5,923	539	6,462	1,866	98	1,964
Dād ...	1887-88 ...	...	772	772	6,430	952	7,382	4,231	289	4,520
	1888-89 ...	...	673	673	7,989	976	8,965	4,408	28	4,697
	1889-90 ...	...	425	425	8,837	1,158	9,995	4,674	324	4,998
	1890-91 ...	1	553	554	7,438	1,126	8,564	5,110	579	5,689
	1891-92 ...	...	602	602	8,548	1,296	9,844	4,087	538	4,625

CHOP.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
1	...	1	15	96	111	2,119	1,584	3,703
10	...	10	92	...	92	4,063	266	4,319
1	...	1	86	2	88	3,612	331	3,943
14	...	14	20	32	52	3,202	1,907	5,109
1	...	1	34	3	37	5,008	617	5,625
...	8	8	...	41	41	487	77	564
19	...	19	32	1	33	922	4	926
25	1	26	25	1	26	323	86	409
...	5	5	23	2	25	83	25	108
1	4	5	37	1	38	89	5	94
10	99	109	14	832	846	105	16,521	16,626
66	403	469	45	1,447	1,492	402	29,112	29,514
70	81	151	15	3,281	3,296	350	21,190	21,540
27	939	1,016	43	550	593	435	13,069	13,564
94	2,828	2,922	29	189	213	477	11,846	12,322
2,261	1,356	3,617	2,355	6,073	8,428	11,423	71,653	83,076
4,769	3,014	7,783	2,762	8,804	11,566	16,190	77,853	94,043
6,399	3,589	9,988	4,258	5,051	9,309	23,731	74,898	98,629
11,824	4,485	16,309	2,558	2,816	5,374	29,382	61,706	91,088
9,913	3,221	13,134	2,524	1,730	4,254	26,124	62,159	88,283
405	3	408	135	61	196	1,545	930	2,475
648	31	679	199	537	736	1,739	1,357	3,076
1,423	1,019	2,442	363	535	898	4,948	3,740	8,688
1,415	339	1,754	374	214	588	4,746	1,953	6,739
1,157	357	1,514	389	431	820	4,417	2,491	6,908
262	...	...	90	224	314	903	543	1,446
490	313	803	165	521	686	1,487	959	2,446
503	28	531	125	518	643	1,491	769	2,260
431	1	432	126	345	471	1,459	641	2,100
504	4	544	133	209	342	1,744	562	2,306
...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...
31	40	61	80	509	589	581	3,881	4,472
75	866	839	50	491	481	318	6,763	7,023
75	1,092	1,167	54	338	392	433	4,768	5,221
50	682	732	91	1,340	1,431	277	23,733	24,010
66	898	964	183	1,711	1,894	762	32,759	33,521
304	319	623	965	2,580	3,545	3,609	32,680	36,289
1,800	3,498	5,298	753	551	1,304	4,769	29,863	34,638
1,090	2,030	3,120	325	271	596	2,531	25,172	27,703
81	3	84	1,209	481	1,690	11,367	1,034	12,401
102	1	103	1,095	736	1,831	12,098	1,012	13,110
102	8	110	1,326	944	2,270	11,864	1,518	13,382
147	...	147	1,007	643	1,650	10,721	993	11,714
121	8	129	1,098	663	1,763	10,495	1,217	11,712
137	65	202	1,434	1,235	2,669	10,950	5,255	16,205
186	73	259	2,682	1,762	4,444	14,866	5,512	20,378
177	81	258	1,739	2,727	4,446	14,466	6,978	21,444
203	70	273	1,305	2,108	3,413	13,420	6,146	19,566
233	82	315	1,432	2,018	3,450	13,747	6,581	20,328
255	35	290	8,615	3,574	12,189	34,137	10,490	44,627
258	64	302	9,809	4,294	14,103	36,367	10,893	47,170
195	47	243	7,091	4,533	12,224	36,897	11,891	47,788
285	77	362	5,989	3,236	8,225	31,582	12,024	43,606
216	36	252	7,001	3,142	10,143	38,153	10,853	44,006
30	1	31	681	127	808	6,010	449	6,459
12	8	20	749	91	840	6,341	590	6,932
20	...	20	604	25	629	8,277	667	8,944
38	2	40	571	112	683	8,757	733	9,490
28	1	29	769	69	838	8,606	754	9,360
56	2	58	5,498	2,844	8,332	16,205	4,859	21,064
31	1	32	5,552	3,324	8,176	18,280	5,263	23,543
58	10	68	5,441	3,346	8,787	19,019	5,257	24,276
94	10	104	5,629	3,381	9,010	18,272	5,649	23,921
65	5	70	5,247	3,030	8,277	17,947	5,471	23,418

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
86	927	1,013	15	178	193	...	39	39
65	272	337	10	9	19	...	...	...
306	671	977	24	177	201	44	90	134
1,277	...	1,277	...	216	216	34	117	151
709	1,202	1,911	5	290	295	23	44	67
467	1,112	1,579	3	...	3	...	227	227
373	1,107	1,480	...	...	...	...	449	449
172	4,713	4,885	...	2	2	...	1,230	1,230
102	5,046	5,148	...	...	...	...	578	578
549	2,565	3,114	...	...	...	3	52	55
53	3,629	3,682	6	105	111	14	3,157	3,171
135	3,773	3,908	8	104	112	56	2,973	3,029
209	14,508	14,517	8	85	93	139	44,087	44,826
164	8,057	8,221	10	47	57	55	15,948	16,003
233	6,577	6,810	16	25	41	164	6,782	6,946
2,604	10,207	12,811	100	208	308	1,051	4,594	5,645
5,749	9,784	15,533	325	202	437	1,658	4,913	6,571
5,239	8,643	13,882	218	259	477	1,609	3,911	5,520
7,153	8,445	15,598	160	112	272	1,095	2,145	3,240
8,964	15,710	24,674	279	160	439	1,103	3,327	4,436
2	...	2	...	...	...	40	43	83
...	4	4	...	...	...	69	69	69
69	19	88	...	...	...	352	86	438
173	10	183	...	...	...	2	320	322
431	21	452	...	...	...	...	...	96
52	61	113	...	...	...	...	...	16
...	32	32	...	...	...	...	13	13
125	...	125	...	...	...	50	...	50
96	139	235	...	...	...	1	3	4
165	161	326	...	...	...	...	17	17
...	...	...	...	...	...	...	...	...
...	199	199	...	3	3	...	1,448	1,448
2	698	700	...	9	9	5	1,510	1,515
21	853	874	...	1	1	10	1,450	1,460
71	1,578	1,649	1	35	36	99	4,359	4,458
282	2,441	2,723	18	72	90	496	5,515	6,011
765	2,565	3,330	9	21	30	1,283	6,747	8,030
664	1,327	1,991	16	30	46	307	453	760
557	1,734	2,291	4	34	38	520	2,945	3,465
117	129	246	4	...	4	16	8	24
304	9	313	8	...	8	82	10	92
1,154	56	1,210	14	3	17	69	49	118
922	16	938	11	1	12	258	5	263
1,095	138	1,233	11	2	13	108	8	116
917	1,244	2,161	16	11	27	90	138	228
956	1,002	1,958	16	17	33	125	36	161
2,298	1,394	3,692	30	17	47	150	122	272
1,781	1,466	3,247	29	7	36	236	159	395
2,130	1,587	3,717	34	16	50	207	86	290
1,969	1,456	3,425	26	28	54	211	132	343
1,863	1,480	3,343	34	24	58	192	52	244
2,646	1,734	4,380	41	15	56	183	172	355
1,918	2,125	4,043	50	53	103	132	204	336
2,352	2,280	4,632	53	23	76	295	191	486
560	18	578	33	6	39	36	2	38
284	103	387	9	6	15	29	61	90
380	160	540	10	1	11	4	1	5
760	314	1,074	15	1	16	...	159	159
1,152	686	1,838	31	2	33	...	85	86
326	497	823	20	14	34	36	185	221
259	624	883	26	20	46	78	138	216
287	832	1,119	21	51	72	251	383	634
441	947	1,388	23	77	100	288	426	714
705	1,501	2,206	40	133	173	609	1,046	1,655

RETURN—continued.

Crops.						Total Cultivation.			Remarks.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
...	334	334	101	1,478	1,579	2,220	3,062	5,282	
33	7	40	168	288	396	4,161	554	4,715	
65	212	277	439	1,150	1,589	4,051	1,481	5,532	
238	...	238	1,549	333	1,882	4,751	2,240	6,991	
39	397	436	776	1,933	2,709	5,784	2,550	8,334	
...	89	89	470	1,428	1,898	957	1,505	2,462	
...	183	183	373	1,739	2,112	1,295	1,743	3,038	
8	189	197	180	6,134	6,314	503	6,220	6,723	
6	208	209	108	5,827	5,935	191	5,852	6,043	
...	148	148	552	2,765	3,317	641	2,770	3,411	
116	1,054	1,170	189	7,945	8,134	294	24,466	24,760	
56	1,688	1,744	255	8,538	8,793	657	37,650	38,307	
180	4,938	5,118	536	64,018	64,554	886	85,208	86,094	
61	11,245	11,306	290	36,297	36,587	725	49,366	50,091	
76	3,647	3,723	489	17,031	17,520	966	28,876	29,842	
165	2,987	3,152	3,920	17,996	21,916	15,343	89,649	1,04,992	
234	5,021	5,255	7,876	19,920	27,796	24,066	97,773	1,21,839	
749	2,914	3,663	7,815	15,727	23,542	31,546	90,625	1,22,171	
61	367	368	8,469	11,009	49,478	37,851	72,715	1,10,566	
82	1,146	1,228	10,434	20,343	30,777	36,558	82,502	1,19,060	
11	...	11	53	43	96	1,598	973	2,571	
...	...	...	...	73	73	1,739	1,410	3,149	
9	104	113	430	209	639	5,378	3,949	9,327	
...	...	...	203	330	533	4,949	2,323	7,272	
...	...	3	443	108	551	4,860	2,599	7,459	
...	...	...	54	75	129	957	618	1,575	
...	9	9	...	54	54	1,487	1,013	2,500	
9	...	9	184	...	184	1,675	769	2,444	
...	...	1	97	143	240	1,556	784	2,340	
1	...	4	166	181	347	1,910	743	2,653	
...	...	...	...	...	...	...	...	...	
...	...	...	...	1,650	1,650	581	5,541	6,122	
...	26	26	7	2,243	2,250	325	8,948	9,273	
26	97	123	57	2,401	2,458	490	7,189	7,679	
82	1,550	1,632	253	7,522	7,775	530	31,255	31,785	
234	2,288	2,522	1,030	10,316	11,346	1,792	48,075	44,867	
294	799	1,093	2,361	10,132	12,483	5,960	42,812	48,772	
64	288	352	1,051	2,098	3,149	5,820	31,967	37,787	
222	1,132	1,354	1,303	5,845	7,148	3,834	31,017	34,851	
38	19	57	175	156	331	11,542	1,190	12,732	
577	...	577	971	19	990	13,069	1,031	14,100	
73	3	76	1,310	111	1,421	13,174	1,629	14,803	
80	3	83	1,271	25	1,296	11,992	1,018	13,010	
...	94	94	1,214	242	1,456	11,709	1,459	13,168	
55	91	146	1,078	1,484	2,562	12,028	6,739	18,767	
71	37	108	1,168	1,092	2,260	16,034	6,604	22,638	
82	124	216	2,560	4,667	4,227	17,026	8,645	25,671	
59	161	220	2,105	1,793	3,898	15,525	7,939	23,464	
...	202	202	2,371	1,891	4,262	16,118	8,472	24,590	
198	206	404	2,404	1,822	4,226	36,541	12,312	48,853	
90	153	243	2,179	1,709	3,888	38,546	12,512	51,058	
165	109	274	2,935	2,030	4,965	38,832	13,921	52,753	
126	288	414	2,226	2,670	4,896	33,808	14,694	48,502	
114	68	182	2,614	2,562	5,376	35,967	13,415	49,382	
12	2	14	641	28	669	6,651	477	7,128	
12	13	25	334	183	517	6,574	775	7,449	
6	...	6	400	162	562	8,677	829	9,506	
...	...	...	775	474	1,249	9,532	1,207	10,739	
...	2	2	1,183	775	1,958	9,789	1,529	11,318	
15	494	509	397	1,190	1,587	16,602	6,049	22,651	
38	190	237	401	981	1,382	18,681	6,244	24,925	
89	185	274	648	1,451	2,099	19,658	6,708	26,366	
22	467	489	774	1,917	2,691	19,046	7,566	26,612	
26	310	336	1,380	2,990	4,370	19,327	8,461	27,788	

CROP

Canals.	Years.	KHARIF.								
		CLASS OF								
		Rice.			Jowari.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Ren ...	1887-88 ...	...	...	...	1,027	17	1,044	10,257	52	10,303
	1888-89 ...	...	172	172	1,703	6	1,709	8,260	13	8,279
	1889-90 ...	...	125	125	1,623	26	1,649	8,053	79	8,132
	1890-91 ...	...	231	231	1,532	40	1,572	9,542	248	9,790
	1891-92 ...	...	162	162	1,981	128	2,109	9,370	464	9,834
Alibhar cheri.	1887-88 ...	...	...	...	394	...	394	4,342	...	4,342
	1888-89 ...	...	...	...	961	...	961	5,194	...	5,194
	1889-90 ...	...	...	...	1,143	...	1,143	5,801	...	5,801
	1890-91 ...	...	...	...	701	11	712	5,392	62	5,454
	1891-92 ...	...	...	...	727	3	730	6,175	19	6,194
Marak...	1887-88 ...	...	11	11	2,491	52	2,543	20,099	453	20,552
	1888-89 ...	...	...	...	3,487	59	3,546	20,757	324	21,081
	1889-90 ...	2	7	9	3,859	138	3,997	23,539	349	23,888
	1890-91 ...	...	43	43	2,482	80	2,562	23,833	816	24,649
	1891-92 ...	...	82	82	2,774	110	2,884	27,955	723	28,678
Gharo Mah- muda.	1887-88 ...	110	11	121	1,965	2	1,967	27,751	162	27,893
	1888-89 ...	...	150	150	2,739	14	2,753	27,942	174	27,716
	1889-90 ...	112	22	134	3,365	53	3,419	28,408	419	28,827
	1890-91 ...	...	106	106	2,711	141	2,852	31,709	1,413	32,122
	1891-92 ...	...	163	163	3,110	144	3,254	29,713	1,268	30,981
Kari Shumali...	1887-88 ...	...	13	13	1,171	1	1,172	18,211	15	18,226
	1888-89 ...	...	...	...	1,862	2	1,864	20,138	41	20,179
	1889-90 ...	...	...	...	1,499	5	1,504	20,682	118	20,800
	1890-91 ...	...	...	...	1,040	9	1,049	21,997	48	22,015
	1891-92 ...	...	...	...	1,215	2	1,217	18,938	...	19,038
Nasir ...	1887-88 ...	...	...	...	1,105	...	1,105	16,832	...	16,832
	1888-89 ...	...	55	55	912	...	912	18,167	3	18,167
	1889-90 ...	...	3	3	1,102	...	1,102	18,691	2	18,691
	1890-91 ...	...	3	3	887	...	887	20,097	8	20,097
	1891-92 ...	...	3	3	1,161	1	1,162	16,923	23	17,011
Sarfranzsh ...	1887-88 ...	...	4	4	312	...	312	12,610	40	12,650
	1888-89 ...	...	12	12	456	7	463	13,206	260	13,466
	1889-90 ...	...	...	...	641	34	675	13,970	421	14,391
	1890-91 ...	...	...	...	563	35	598	14,813	452	15,265
	1891-92 ...	...	39	39	765	53	818	14,226	483	14,709
Other Canals...	1887-88 ...	...	77	77	6,836	1,003	7,839	8,924	198	9,122
	1888-89 ...	...	26	26	8,352	1,237	9,589	8,089	220	8,309
	1889-90 ...	7	38	45	9,490	1,404	10,894	8,665	206	8,871
	1890-91 ...	1	64	65	8,405	1,105	9,510	8,370	693	9,063
	1891-92 ...	25	107	132	9,739	1,132	10,871	8,239	581	8,820
Fuleli Canal ...	1887-88 ...	49	1,26,186	1,26,235	1,571	801	2,372	47,878	3,696	51,574
	1888-89 ...	19	1,27,060	1,27,079	2,383	1,537	3,920	52,883	1,633	58,536
	1889-90 ...	18	1,22,845	1,22,863	2,932	3,120	6,052	60,814	14,292	75,106
	1890-91 ...	14	1,36,274	1,36,288	1,924	1,360	3,284	64,782	8,700	73,482
	1891-92 ...	10	1,27,692	1,27,702	3,208	2,320	5,528	60,895	8,569	69,455
Other Canals	1887-88 ...	...	9,169	9,169	145	3	148	5,132	106	5,238
	1888-89 ...	...	9,149	9,149	373	62	435	6,075	356	6,431
	1889-90 ...	...	10,418	10,418	596	167	753	8,047	1,380	9,427
	1890-91 ...	...	8,737	8,737	319	56	375	5,317	291	5,608
	1891-92 ...	...	9,832	9,832	544	32	576	6,345	367	6,712
Canals North of Kotri.	1887-88 ...	...	918	918	4,966	1,462	6,428	3,260	177	3,437
	1888-89 ...	1	687	688	6,310	1,796	8,106	2,877	222	3,099
	1889-90 ...	1	422	423	6,493	2,549	9,042	3,244	364	3,608
	1890-91 ...	...	560	560	1,917	211	2,128	1,979	21	2,000
	1891-92 ...	...	875	875	1,781	216	1,997	1,713	39	1,752
Kalri ...	1887-88 ...	...	4,797	4,797	402	...	402	1,444	...	1,444
	1888-89 ...	...	5,685	5,685	597	...	597	2,178	130	2,308
	1889-90 ...	...	5,256	5,256	819	...	819	2,871	...	2,871
	1890-91 ...	...	5,766	5,766	520	3	523	3,137	21	3,158
	1891-92 ...	...	6,101	6,101	629	19	648	3,280	143	3,423
Baghar ...	1887-88 ...	...	6,787	6,787	1	...	1	4,154	...	4,154
	1888-89 ...	16	7,922	7,938	28	...	28	5,414	66	5,480
	1889-90 ...	...	7,421	7,421	56	...	56	4,684	874	4,958
	1890-91 ...	3	10,130	10,133	9	1	10	5,829	311	6,140
	1891-92 ...	6	10,337	10,343	...	10	10	6,202	239	6,441

CROPS.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
796	1	797	2,315	5	2,290	14,295	75	14,370
1,382	---	1,382	1,942	9	1,951	13,287	200	13,487
1,283	4	1,287	1,771	48	1,819	12,730	282	13,012
1,380	15	1,395	2,479	45	2,524	13,083	379	13,462
1,400	32	1,432	2,998	154	3,152	15,749	940	16,689
321	---	321	585	---	585	5,642	---	5,642
1,013	---	1,013	718	---	718	5,886	---	5,886
1,161	---	1,161	741	49	760	8,816	49	8,865
952	10	962	833	8	841	7,878	91	7,969
1,058	2	1,060	1,144	2	1,146	9,134	26	9,160
8,437	337	8,774	3,157	223	3,380	34,184	1,076	35,260
11,802	401	12,203	3,224	173	3,396	39,270	956	40,226
12,906	265	13,171	4,179	106	4,285	44,485	808	45,293
10,226	296	10,522	3,438	203	3,641	39,379	1,438	41,417
---	---	---	---	---	---	---	---	---
9,286	85	9,371	2,872	103	2,975	41,964	363	42,327
12,343	113	12,456	3,506	108	3,614	46,130	550	46,680
13,683	235	13,918	3,473	200	3,673	50,042	949	50,991
13,933	446	14,379	3,208	139	3,347	51,501	2,245	53,746
13,661	449	14,110	3,360	144	3,504	49,844	2,168	52,012
5,405	10	5,416	3,179	1	3,180	27,967	40	28,007
8,492	14	8,506	3,136	9	3,145	33,728	66	33,794
9,224	1	9,225	3,487	20	3,507	34,892	144	35,036
7,032	10	7,042	2,914	5	2,919	32,383	72	32,455
5,954	10	5,964	2,558	14	2,572	28,708	95	28,803
5,254	---	5,254	2,117	---	2,117	25,304	19	25,323
6,170	---	6,170	1,752	1	1,753	26,998	74	27,072
6,103	---	6,103	1,595	1	1,596	26,889	6	26,895
4,867	---	4,867	1,563	2	1,565	27,406	58	27,464
4,910	---	4,910	1,806	6	1,812	24,895	148	25,043
2,598	55	2,653	1,647	21	1,668	17,367	120	17,487
3,333	10	3,343	1,616	150	1,766	18,611	439	19,050
3,268	51	3,319	1,273	102	1,375	19,152	608	19,760
3,438	98	3,536	1,084	58	1,142	20,498	643	21,141
3,401	165	3,566	1,800	47	1,847	20,192	787	20,979
133	3	136	2,219	458	2,377	18,112	1,459	19,571
189	3	192	1,866	176	2,042	18,566	1,562	20,128
237	7	244	1,750	217	1,967	20,149	1,872	22,021
230	21	251	1,741	395	2,136	18,747	2,278	21,025
155	11	166	1,683	451	2,084	19,791	2,282	22,073
4,573	464	5,037	7,031	2,362	9,393	61,102	1,33,500	1,94,611
8,011	733	8,744	7,581	2,358	10,439	70,877	1,37,841	2,08,718
10,829	1,665	12,494	8,084	2,564	10,948	82,577	1,44,786	2,27,463
11,454	1,823	13,277	8,290	1,823	10,113	86,464	1,49,980	2,36,444
11,977	1,711	13,688	8,763	2,565	11,328	84,853	1,42,848	2,27,701
100	---	100	674	334	1,008	6,071	9,612	15,683
141	23	164	663	280	923	7,252	9,850	17,102
236	45	281	441	343	784	9,320	12,343	21,663
372	202	574	682	553	1,035	6,690	9,639	16,329
296	42	338	526	299	825	7,911	10,592	18,503
186	---	186	539	225	764	8,945	2,782	11,727
260	15	275	476	255	731	9,944	2,975	12,919
299	26	325	379	132	511	10,416	3,493	13,909
219	38	257	99	41	140	4,214	871	5,085
33	9	42	108	8	116	3,635	1,147	4,782
1	---	1	1,041	27	1,068	2,888	4,824	7,712
---	---	---	1,170	---	1,170	2,945	5,815	8,759
---	---	---	913	320	1,233	3,688	6,135	9,823
1	---	1	642	416	1,058	4,300	6,206	10,506
4	---	4	971	65	1,036	4,884	6,328	11,212
---	---	---	2,410	51	2,461	6,565	6,838	13,403
---	---	---	3,259	151	3,410	8,717	8,139	16,856
---	---	---	3,681	90	3,771	7,621	8,385	16,206
---	---	---	1,798	199	1,997	7,634	10,641	18,275
---	---	---	1,443	92	1,540	7,656	10,678	18,334

RABH

CLASS OF

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
178	121	300	1	6	7	84	84	168
75	119	194	...	1	1	21	38	59
127	222	349	3	3	6	317	364	681
191	129	320	4	2	6	238	691	929
5	256	261	...	1	1	7	26	33
7	...	7	...	...	...	1	...	1
1	...	1	...	...	...	2	...	2
3	...	3	...	...	...	12	5	17
8	...	8	8	...	8	1	6	7
...	...	...	...	...	...	3	...	3
3	23	26	...	...	...	16	47	63
...	17	17	...	...	...	52	64	116
...	28	28	...	...	...	3	192	195
34	2	36	...	...	...	224	202	426
61	75	136	...	...	...	43	137	180
93	157	250	4	...	4	132	527	659
171	167	338	...	...	...	99	221	326
156	425	581	1	1	2	322	1,719	2,041
157	372	529	...	...	...	110	606	716
264	744	1,008	...	...	...	158	617	775
76	181	257	3	...	3	62	23	85
97	197	294	...	...	...	25	44	69
196	218	324	...	...	...	133	172	305
77	235	332	...	...	...	72	511	583
407	260	607	3	...	3	87	8	165
...	108	108	...	...	...	10	...	34
...	78	78	...	...	...	13	...	47
7	150	157	...	...	...	156	...	298
10	231	241	...	...	...	17	...	515
20	206	226	...	...	...	123	...	183
...	203	203	...	1	1	4	...	71
...	124	124	...	...	...	112	...	112
45	323	368	...	...	...	109	118	227
11	420	431	...	4	4	69	481	550
14	404	418	1	5	6	50	160	250
1,940	688	2,628	52	56	108	254	116	370
1,572	602	2,174	55	15	70	209	75	284
2,455	1,211	3,666	45	40	85	434	394	828
2,308	1,269	3,577	43	27	70	407	1,111	1,518
2,805	2,003	4,808	71	85	154	236	729	965
194	4,569	4,763	51	949	1,000	111	8,938	9,049
551	3,946	4,497	86	1,677	1,763	702	13,224	13,926
377	7,757	8,334	185	2,850	3,035	1,358	17,645	19,003
324	8,171	8,495	36	2,384	2,420	785	17,803	18,588
692	10,624	11,316	79	3,126	3,205	263	19,659	19,922
19	157	176	3	10	13	36	52	88
40	153	193	...	11	11	34	125	169
472	1,436	1,908	459	1,944	1,803	2,107	2,320	4,427
79	782	861	6	140	146	24	994	1,018
27	1,074	1,101	2	7	9	...	167	167
296	818	1,114	3	48	51	85	807	892
404	554	958	7	21	28	60	239	299
750	1,188	1,938	49	50	99	55	1,363	1,358
46	856	902	1	2	3	...	816	816
7	1,679	1,686	...	...	...	10	753	763
...	...	...	...	170	170	...	2	2
...	...	...	50	284	334	...	20	20
...	46	46	...	865	865	...	34	34
...	8	8	...	219	219	...	335	335
...	7	7	24	865	889	...	100	100
...	...	...	27	1,733	1,760	...	12	12
...	3	3	...	1,227	1,227	...	5	5
...	...	...	118	5,186	5,304	3	133	136
...	158	158	80	2,360	2,440	...	659	659
...	...	...	58	4,015	4,068	...	591	591

RETURN—continued.

Crops.						Total Cultivation.			Remarks.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
32	112	144	295	333	628	14,590	408	14,998	
27	75	102	123	233	356	13,410	433	13,843	
15	87	102	462	676	1,138	13,192	953	14,150	
11	49	60	444	671	1,115	15,527	1,430	16,977	
...	62	62	12	345	357	15,761	1,285	17,046	
11	68	79	19	68	87	5,661	68	5,729	
3	66	69	16	66	72	5,892	66	5,958	
1	12	13	16	17	33	8,832	66	8,898	
6	58	64	23	64	87	7,901	155	8,056	
53	34	87	56	31	90	9,190	60	9,250	
18	341	359	37	411	448	34,221	1,487	35,708	
25	360	386	77	441	518	39,347	1,397	40,744	
4	317	321	7	537	544	44,492	1,405	45,897	
32	336	368	290	540	830	40,269	1,978	42,247	
85	334	419	189	546	735	44,990	2,074	47,064	
211	1,572	1,783	440	2,256	2,696	42,404	2,619	45,023	
188	1,403	1,591	458	1,791	2,249	46,589	2,349	48,938	
36	1,551	1,587	515	3,696	4,211	50,557	4,645	55,202	
214	2,201	2,415	481	3,179	3,660	52,042	5,424	57,466	
125	2,005	2,130	547	3,366	3,913	50,391	5,534	55,925	
47	205	252	188	409	597	28,155	449	28,604	
106	253	359	228	491	722	33,856	560	34,416	
168	225	393	427	615	1,042	35,319	759	36,078	
64	37	99	213	1,091	1,304	32,596	1,163	33,759	
79	35	53	576	732	1,328	29,284	847	30,131	
404	562	966	414	694	1,108	25,718	713	26,431	
386	287	673	401	397	798	27,399	471	27,870	
387	469	858	552	761	1,313	27,441	767	28,208	
281	758	1,039	328	1,467	1,795	27,734	1,625	29,259	
213	610	823	356	876	1,232	25,251	1,024	26,275	
118	324	442	122	595	717	17,289	715	18,004	
80	164	244	80	400	480	18,691	839	19,530	
101	300	401	255	741	996	19,407	1,349	20,756	
91	372	463	171	1,277	1,448	20,669	1,920	22,589	
128	360	488	233	929	1,162	20,425	1,716	22,141	
139	280	419	2,385	1,140	3,525	20,497	2,579	23,076	
104	101	205	1,940	793	2,733	20,446	2,455	22,901	
158	179	337	3,092	1,824	4,916	23,241	3,696	26,937	
72	310	382	2,830	2,717	5,547	21,577	4,096	26,572	
56	318	371	3,168	3,223	6,391	22,959	5,505	28,464	
1,245	9,872	11,117	1,601	24,328	25,929	62,703	1,57,837	2,20,540	
1,038	4,585	5,673	2,427	23,432	25,859	73,304	1,61,273	2,34,577	
1,250	8,647	9,897	3,370	36,809	40,269	86,047	1,81,685	2,67,732	
888	10,699	11,587	2,033	39,057	41,090	88,497	1,89,037	2,77,534	
887	6,895	7,782	1,921	40,304	42,225	86,774	1,83,152	2,69,926	
195	365	560	253	584	837	6,324	10,196	16,520	
130	322	452	204	611	815	7,456	10,461	17,917	
468	915	1,383	3,506	6,015	9,521	12,826	18,358	31,184	
3	192	195	112	2,108	2,220	6,802	11,747	18,549	
19	116	135	48	1,364	1,412	7,959	11,956	19,915	
67	473	540	451	2,176	2,627	9,396	4,968	14,364	
88	118	206	559	932	1,491	10,503	3,207	14,410	
154	282	436	1,033	2,823	3,861	11,454	6,316	17,710	
64	423	487	111	2,097	2,208	4,325	2,968	7,293	
7	302	309	24	2,734	2,768	3,659	3,881	7,540	
9	466	475	9	638	647	2,897	5,462	8,359	
60	486	546	110	790	900	4,055	6,605	10,660	
447	177	624	447	1,122	1,569	5,050	6,698	11,748	
207	497	704	207	1,059	1,266	4,507	7,273	11,780	
33	532	565	57	1,504	1,561	4,941	7,832	12,773	
329	857	1,186	356	2,602	2,958	6,921	9,440	16,361	
121	655	776	121	1,890	2,011	8,838	10,020	18,867	
121	1,084	1,050	242	6,403	6,645	8,963	14,788	25,851	
114	2,061	2,175	194	5,238	5,432	7,828	15,879	23,707	
47	1,786	1,833	100	6,392	6,492	7,756	17,070	24,826	

CROP

Canals.		Years.	CLASS OF								
			Rice.			Jowari.			Bajri.		
			Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Uchita...	1887-88	...	...	9,493	9,493	...	...	...	47	...	47
	1888-89	9	...	9,423	9,432	...	...	...	27	...	27
	1889-90	22	...	8,250	8,272	...	...	...	54	22	76
	1890-91	20	...	10,248	10,268	...	...	...	83	...	83
	1891-92	10	...	9,913	9,923	...	...	...	131	3	134
Canals in Tatta	1887-88	...	...	6,177	6,177	4	...	4	278	44	322
	1888-89	...	2	...	9,911	9,913	11	8	19	473	8
	1889-90	...	...	8,166	8,166	17	45	62	375	155	530
	1890-91	1	...	8,533	8,534	60	...	60	563	38	601
	1891-92	2	...	6,305	6,307	...	...	...	571	46	617
Sbal Canal	1887-88	...	...	2,239	2,239	...	...	...	...	184	184
	1888-89	...	...	2,427	2,427	...	...	...	10	97	107
	1889-90	...	...	2,301	2,301	3	...	3	10	325	335
	1890-91	...	...	2,435	2,435	5	...	5	30	...	70
	1891-92	...	...	2,317	2,317	...	...	...	...	70	70
Pinyari	1887-88	...	...	57,213	57,213	...	8	8	2,136	12	2,148
	1888-89	6	...	59,497	59,503	16	10	26	2,434	54	2,488
	1889-90	23	...	64,215	64,238	47	43	90	3,165	232	3,397
	1890-91	7	...	61,555	61,562	28	3	31	2,485	169	2,654
	1891-92	105	...	59,464	59,569	92	13	105	2,657	51	2,708
Canals in Mirpur Batoro.	1887-88	...	...	7,828	7,828	2	4	6	1,700	9	1,709
	1888-89	...	...	9,496	9,496	46	4	50	2,655	62	2,717
	1889-90	...	...	10,451	10,451	46	25	71	3,510	533	4,043
	1890-91	...	...	10,160	10,160	66	5	71	3,152	582	3,082
	1891-92	...	...	9,681	9,681	118	28	141	3,129	5	3,129
Canals in Sujawal.	1887-88	28	...	5,145	5,173	1	...	1	507	51	558
	1888-89	...	...	5,622	5,622	...	...	...	732	25	777
	1889-90	...	...	10,451	10,451	46	25	71	3,510	533	4,043
	1890-91	...	...	6,157	6,157	...	...	...	631	4	635
	1891-92	...	...	5,658	5,658	...	...	...	435	8	443
Satta	1887-88	...	...	5,241	5,241	2	...	2	2,429	...	2,429
	1888-89	...	...	4,632	4,632	15	2	17	2,796	1	2,797
	1889-90	...	...	4,804	4,804	48	2	50	3,388	...	3,388
	1890-91	...	...	5,800	5,800	6	9	15	2,805	5	2,810
	1891-92	37	...	5,610	5,647	13	11	24	2,922	16	2,937
Canals in Jati	1887-88	...	...	1,551	1,551	...	...	...	226	...	226
	1888-89	...	...	1,848	1,848	...	...	...	142	...	142
	1889-90	...	...	1,577	1,577	...	2	2	183	...	183
	1890-91	...	...	1,622	1,622	...	...	...	234	...	234
	1891-92	...	...	1,389	1,389	11	6	17	469	2	471
Khanla	1887-88	...	...	4,504	4,504	...	...	...	13	...	13
	1888-89	...	...	4,154	4,154	...	...	...	19	30	49
	1889-90	...	...	4,280	4,280	16	...	16	54	...	64
	1890-91	...	...	5,117	5,117	...	...	...	48	...	48
	1891-92	...	...	5,013	5,013	...	9	9	18	14	32
Kokowari	1887-88	...	...	11,512	11,512	...	...	...	...	...	...
	1888-89	...	...	8,001	8,001	...	1	...	...	...	...
	1889-90	...	...	11,700	11,700	...	...	...	37	...	37
	1890-91	...	...	12,627	12,630	...	...	...	21	...	21
	1891-92	3	...	13,567	13,575	...	...	...	25	...	25
Canals in Shshbandar.	1887-88	...	...	1,126	1,126	15	...	15	86	...	86
	1888-89	...	...	1,181	1,181	20	...	20	144	...	144
	1889-90	...	...	1,333	1,333	...	...	...	215	...	215
	1890-91	...	...	1,683	1,683	...	...	...	178	...	178
	1891-92	...	...	1,762	1,762	3	...	3	177	...	177
Bunda, Bank.	1887-88	...	...	...	...	...	...	...	...	...	...
	1888-89	...	...	...	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...
	1891-92	...	...	...	...	...	...	...	...	...	...
Bunda, Bank.	1887-88	...	...	...	...	...	...	...	...	...	...
	1888-89	...	...	...	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...
	1891-92	...	...	...	...	...	...	...	...	...	...

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RABL.

CLASS OF _____

RETURN—concluded.

Crops.						Total Cultivation.			REMARKS.
Other Crops.			Total Rabi.			Total Cultivation.			
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
51	570	621	51	772	893	221	10,306	10,527	
61	361	422	81	455	516	394	9,941	10,335	
84	705	789	95	910	1,005	429	9,401	9,830	
83	949	1,032	93	1,087	1,180	475	11,541	12,016	
76	588	664	97	753	855	475	10,908	11,383	
...	193	198	...	946	946	375	7,191	7,566	
52	246	298	63	624	687	731	10,643	11,374	
21	312	333	21	1,423	1,444	578	9,907	10,480	
48	407	455	48	1,509	1,537	777	10,255	11,032	
...	472	472	5	1,465	1,470	663	7,902	8,565	
...	87	87	...	343	343	...	2,793	2,793	
...	332	332	...	473	473	10	3,011	3,021	
4	15	19	4	297	301	18	2,947	2,965	
83	75	168	83	574	637	134	3,009	3,143	
...	24	24	...	539	539	...	2,926	2,926	
...	672	672	...	2,112	2,112	5,943	59,860	65,803	
127	148	275	141	2,135	2,276	4,887	62,041	66,928	
158	2,763	2,921	235	7,995	8,230	4,785	73,153	77,948	
77	826	903	128	2,420	2,548	3,878	64,570	68,448	
140	486	626	163	1,951	2,114	4,324	61,899	66,223	
...	187	187	...	635	635	2,116	8,729	10,845	
...	129	129	4	779	783	3,814	10,354	13,898	
...	420	420	4	2,069	2,063	4,222	13,521	17,748	
...	649	649	...	2,405	2,405	3,333	12,835	16,168	
...	433	433	...	1,137	1,137	3,588	11,020	14,608	
...	65	65	...	612	612	623	5,855	6,478	
...	81	81	2	347	349	836	6,062	6,868	
2	110	112	3	1,511	1,514	1,009	6,852	7,861	
1	55	56	1	490	491	669	6,652	7,321	
...	29	29	...	1,078	1,078	453	6,749	7,202	
21	75	95	21	109	130	2,921	6,358	9,279	
10	36	46	18	197	215	3,449	5,109	8,568	
9	164	173	9	467	466	3,907	5,836	9,543	
157	340	497	157	701	858	3,225	7,081	10,306	
7	29	36	12	167	179	3,509	6,076	9,585	
...	58	58	...	267	267	415	1,818	2,233	
1	1	2	1	13	14	191	1,931	2,122	
...	8	8	...	256	256	210	1,841	2,051	
...	13	13	...	572	572	268	2,196	2,464	
...	33	33	...	150	150	512	1,564	2,076	
...	53	53	...	66	66	54	5,168	5,222	
...	...	...	...	98	93	73	4,550	4,632	
...	...	...	...	252	252	141	4,862	5,003	
...	12	12	...	106	106	78	5,337	5,415	
...	13	13	...	67	67	62	5,345	5,407	
...	195	195	...	245	245	15	12,035	12,050	
...	94	94	...	102	102	9	8,202	8,211	
...	268	268	...	335	335	93	12,252	12,345	
...	494	494	...	667	667	88	13,339	13,427	
...	535	535	5	754	759	123	14,398	14,521	
...	27	27	...	35	35	125	1,338	1,463	
...	2	2	...	12	12	182	1,224	1,406	
...	44	44	...	77	77	245	1,449	1,694	
...	83	83	...	123	123	182	1,845	2,027	
...	46	46	...	51	51	203	1,831	2,034	
...	...	...	...	...	...	...	...	...	
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H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Abstract of Crop Returns of Government Land for five years.

Crops.	1874-82.			1886-89.			1890-91.			1891-92.			PERCENTAGE OF FLOW AND LIFT.			Percent of Total Cultivated Area.
	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
Bejri Canals District.																
Kharif.																
Rice ..	..	9,277	9,277	..	7,235	7,235	..	11,384	11,384	..	5,103	5,103	..	6,408	6,408	100
Wheat ..	..	17,632	17,632	..	21,343	21,343	..	113,137	113,137	..	108,115	108,115	..	15,502	15,502	100
Barley ..	..	1,516	1,516	..	1,246	1,246	..	1,179	1,179	..	1,164	1,164	..	26	26	100
Cotton ..	..	4,742	48,751	..	6,917	72,503	..	3,148	43,227	..	1,588	31,677	..	1,900	42,692	100
Other crops ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100
Total ..	23,993	1,72,272	1,96,268	31,617	213,210	244,727	35,011	213,346	248,357	31,901	167,613	199,519	21,626	127,448	149,074	67
Rabi.																
Wheat ..	..	6,033	6,033	..	8,102	8,102	..	3	9,357	9,357	..	10,814	..	..	..	100
Barley ..	..	43	43	..	140	140	..	12	4,092	4,092	..	7,711	..	..	..	100
Oil-seeds ..	..	648	6,443	..	2,658	3,690	..	1,859	1,970	..	6,063	6,713	..	98	100	100
Other crops ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100
Total ..	663	12,860	13,425	2,845	27,496	30,341	136	16,337	16,337	16,403	26,472	29,739	2,670	69,419	72,089	33
Grand Total ..	24,656	185,132	209,691	34,382	240,706	275,068	35,147	229,703	264,698	32,065	194,085	229,255	24,296	197,367	221,673	100
Chikmagalur District.																
Kharif.																
Rice ..	..	27,693	27,693	..	29,491	29,491	..	30,465	30,472	..	23,646	23,646	..	32,064	32,064	100
Wheat ..	..	31,911	31,911	..	30,992	30,992	..	18,711	18,711	..	17,771	17,771	..	20,747	20,747	100
Barley ..	..	1,335	1,335	..	1,758	1,758	..	1,856	1,856	..	1,862	1,862	..	1,653	1,653	100
Cotton ..	..	1,193	1,193	..	432	432	..	218	888	..	1,039	1,039	..	264	264	100
Other crops ..	..	234	871	..	1,448	1,448	..	944	944	..	4,041	4,041	..	1,110	1,110	100
Total ..	1,860	6,286	8,146	1,444	9,138	10,582	571	8,333	8,333	8,333	19,924	19,924	1,924	4,140	5,164	100
Total ..	28,556	68,504	97,060	34,170	70,732	110,952	28,232	86,569	114,663	21,015	72,410	93,425	19,012	64,826	83,868	62
Rabi.																
Wheat ..	..	1,127	21,776	..	1,092	21,684	..	16,440	17,378	..	21,684	21,684	..	44,612	47,011	100
Barley ..	..	89	31	..	11	11	..	1,109	1,120	..	1,109	1,109	..	1,168	1,168	100
Oil-seeds ..	..	1,600	2,311	..	1,600	1,600	..	1,600	1,600	..	1,600	1,600	..	1,600	1,600	100
Other crops ..	..	46	46	..	393	393	..	221	221	..	2,427	2,427	..	317	317	100
Total ..	1,340	26,740	28,080	1,547	24,634	26,181	1,610	19,726	21,336	886	27,680	29,066	313	2,858	3,171	100
Grand Total ..	29,896	95,550	125,446	35,717	101,416	137,133	30,653	106,290	136,518	21,851	99,440	121,841	21,851	112,743	135,377	100
Chikmagalur District.																
Kharif.																
Rice ..	..	72,108	72,108	..	84,623	84,623	..	124,849	124,849	..	120,397	120,397	..	129,476	129,476	100
Wheat ..	..	10,415	10,415	..	10,640	10,640	..	10,114	10,114	..	8,872	8,872	..	47,724	47,724	100
Barley ..	..	405	9,168	..	367	4,570	..	3,890	4,461	..	5,466	5,466	..	1,396	1,396	100
Cotton ..	..	101	613	..	117	236	..	1,337	1,726	..	1,104	1,104	..	31	31	100
Other crops ..	..	2,855	20,977	..	2,682	36,796	..	2,238	15,375	..	1,733	9,932	..	1,957	12,107	100
Total ..	13,956	100,033	204,019	15,210	123,444	138,654	18,088	127,518	145,612	11,561	123,444	135,005	11,561	123,444	135,005	70
Rabi.																
Wheat ..	..	5,291	18,116	..	7,232	31,411	..	6,550	40,556	..	49,319	51,244	..	7,290	71,599	100
Barley ..	..	323	3,412	..	615	8,427	..	20,163	21,234	..	1,132	1,132	..	68	68	100
Oil-seeds ..	..	461	1,099	..	369	5,001	..	7,239	7,700	..	5,411	5,411	..	1,111	14,810	100
Other crops ..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	7	100
Total ..	6,149	23,626	29,776	8,286	39,206	44,432	7,571	68,704	76,325	3,694	70,649	80,243	8,774	80,902	86,736	30
Grand Total ..	20,135	213,659	233,794	23,496	294,770	323,216	20,669	296,533	317,543	15,168	302,692	318,350	27,976	296,000	334,036	100

Sikarpur Canals District.

Crops.	1897-98.			1898-99.			1899-00.			1900-01.			1901-02.			Percent Age of Land and Irrig.
	Flow.		Total.	Flow.		Total.	Flow.		Total.	Flow.		Total.	Flow.		Total.	
	Lift.	Acres.		Lift.	Acres.		Lift.	Acres.		Lift.	Acres.		Lift.	Acres.		
Kharif.	Rice ..	23	174,531	124,659	34	130,536	136,570	46	136,433	135,029	34	142,477	137,892	168	138,100	100
	Jowari ..	6,393	1,474	6,967	7,044	13,830	15,804	154	13,830	15,804	154	13,830	15,804	154	100	100
	Barley ..	10,182	411	10,593	10,593	26,313	26,313	26,313	26,313	26,313	26,313	26,313	26,313	26,313	100	100
	Cotton ..	9,321	3,260	12,511	9,084	1,022	313	37	317	249	30	258	60	84	16	100
	Other crops ..						8,039	9,014	11,053	4,938	2,259	7,187	1,688	77	23	100
	Total ..	31,134	129,753	140,887	36,372	134,996	171,568	83,111	143,738	131,844	28,745	145,724	170,459	29,895	170,459	90
Rabi.	Wheat ..	236	1,234	1,350	406	823	1,229	785	1,134	5,019	48	1,024	1,072	10	2,679	100
	Barley ..	39	2,794	3,894	101	9,383	2,796	354	11,042	12,060	123	4,423	4,444	10	39	100
	Other crops ..	477	3,968	4,440	626	2,950	5,269	1,000	6,352	7,323	824	6,894	7,728	310	53	100
	Total ..	889	11,558	13,446	1,100	9,822	9,922	2,068	25,890	27,388	1,022	19,018	29,070	463	18,747	100
	Grand Total ..	32,022	141,311	173,333	37,472	143,818	181,290	105,179	169,628	159,232	29,767	164,772	194,529	29,258	189,206	100
Kharif.	Rice ..	230	514,000	514,526	56	551,720	551,806	236	514,508	564,744	131	639,039	640,070	268	639,021	100
	Jowari ..	144,693	285,454	430,117	184,039	306,969	490,725	190,029	331,023	541,461	178,132	248,033	401,215	164,759	507,117	100
	Barley ..	6,393	1,474	6,967	7,044	13,830	15,804	154	13,830	15,804	154	13,830	15,804	154	100	100
	Cotton ..	41,383	6,632	48,015	40,763	6,823	48,005	40,963	10,732	71,004	16,972	89,963	47,051	11,017	82,068	100
	Other crops ..	65,096	10,257	100,898	71,273	178,140	244,422	64,368	106,456	170,363	54,150	67,432	121,369	59,010	137,346	100
	Total ..	488,813	969,004	1,438,317	542,311	1,107,376	1,646,656	583,094	1,138,438	1,722,080	53,842	1,053,118	1,598,900	648,578	1,643,520	77
Rabi.	Wheat ..	24,073	102,553	126,631	20,785	106,375	129,100	41,155	147,081	181,900	26,241	143,235	182,576	40,838	231,823	100
	Barley ..	572	6,310	6,882	7,908	8,210	7,113	1,617	125,445	130,448	2,104	76,746	12,413	1,481	11,000	100
	Other crops ..	4,528	33,909	38,437	4,752	33,246	38,711	6,816	47,689	54,617	9,660	54,078	59,966	4,394	49,392	100
	Total ..	32,825	182,566	215,411	40,941	188,833	239,802	53,862	336,149	389,511	53,267	302,192	355,440	65,536	337,821	100
	Grand Total ..	801,688	1,152,099	1,653,728	883,255	1,306,233	1,886,458	636,956	1,474,866	2,111,541	67,069	1,387,210	1,944,409	612,114	1,982,782	100

H. M. THOMPSON,
Superintending Engineer in Sind.

TABLE VIII-A.

TABLE
CROP RETURN,

KHARIF.

CLASS OF

Canals,	Years.	CLASS OF								
		Rice.			Jowari.			Bajri.		
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
Desert Canal	{ Government ... 1891-92 ...	...	254	254	2,692	16,320	19,012	588	1,676	2,269
	{ Foreign ...	...	128	128	5,212	14,496	19,698	...	1,015	1,015
	{ Jāghir ...	...	...	...	...	...	...	...	20	20
	Total ...	...	382	382	7,904	30,806	38,710	588	2,711	3,294
Unharwāh ...	{ Government ... 1891-92 ...	...	673	673	1,186	5,688	6,874	865	2,755	3,620
Begāri ...	{ Government ... 1891-92 ...	...	5,481	5,481	11,615	43,849	55,464	2,748	7,777	10,525
	{ Foreign ...	...	572	572	1,725	3,659	5,384	12	344	356
	{ Jāghir ...	...	...	...	...	1,735	2,602	43	329	372
	Total ...	...	6,053	6,053	14,340	46,143	63,350	2,803	8,440	11,358
Kashmer Bund ...	{ Government ... 1891-92 ...	...	...	...	9	111	120	17	29	46
	Total, Begāri Canal ...	...	7,108	7,108	23,306	86,748	1,09,054	4,988	13,945	18,933
Canals in Rohri ...	{ Government ... 1891-92 ...	...	9,090	9,090	7,853	16,414	23,769	296	567	863
	{ Jāghir ...	...	705	705	854	396	1,350	1	19	20
	Total ...	...	9,795	9,795	7,709	17,410	25,119	297	586	883
Sind Canal ...	{ Government ... 1891-92 ...	...	22,974	22,974	9,716	10,645	20,361	357	189	537
	{ Jāghir ...	...	1,854	1,854	1,012	610	1,622	28	11	39
	Total ...	...	24,828	24,828	10,728	11,255	21,983	385	191	576
	Total, Shikārpur Canal District ...	...	34,623	34,623	18,437	28,665	47,102	682	777	1,459
Sukkur Canal ...	{ Government ... 1891-92 ...	...	26,894	26,894	4,661	10,453	15,114	314	392	616
	{ Jāghir ...	...	402	402	421	387	808	23	16	39
	Total ...	...	27,296	27,296	5,082	10,840	15,922	337	408	715
Ghār Canal ...	{ Government ... 1891-92 ...	...	1,32,542	1,32,542	1,922	35,271	37,193	...	833	1,124
	{ Jāghir ...	...	1,571	1,571	...	4,197	4,197	...	1	1
	Total ...	...	1,34,113	1,34,113	1,922	39,378	41,390	...	899	1,125
	Total, Ghār Canals District ...	...	1,61,409	1,61,409	7,094	50,318	57,223	565	1,217	1,780
Western Nāra ...	{ Government ... 1891-92 ...	10	63,068	63,078	24,787	43,460	68,247	1,023	1,498	2,431
	{ Jāghir ...	...	2,111	2,111	1,131	6,831	7,962	84	309	370
	Total ...	10	65,179	65,189	25,918	50,291	76,209	1,087	1,714	2,801
Pritchard ...	{ Government ... 1891-92 ...	...	196	196	542	2,737	3,279	50	57	107
Wahur ...	{ Government ... 1891-92 ...	...	17	17	2,325	1,804	4,129	76	160	236
Marvi ...	{ Government ... 1891-92 ...	...	185	185	1,684	625	2,309	20	7	27
Phitta ...	{ Government ... 1891-92 ...	...	566	566	4,792	48	4,840	181	...	181
	{ Jāghir ...	...	...	...	613	...	513	36	...	36
	Total ...	...	566	566	5,305	48	5,353	217	...	217
Dādū Canal ...	{ Government ... 1891-92 ...	20	188	208	5,067	2,202	7,239	946	152	1,098
	{ Jāghir ...	...	...	...	213	...	213	10	...	10
	Total ...	20	188	208	5,280	2,202	7,482	956	152	1,108
Manchar ...	{ Government ... 1891-92 ...	...	134	134	508	...	508	...	...	...
	Total, Western Nāra District ...	30	66,475	66,505	41,532	57,707	99,239	2,406	2,990	4,496
Nāra Supply Chan- ...	{ Government ... 1891-92 ...	1	...	1	48	...	48	2	...	2
	{ Jāghir ...	...	...	...	10	...	10	...	...	...
	Total ...	1	...	1	58	...	58	2	...	2
Eastern Nāra ...	{ Government ... 1891-92 ...	...	4,676	4,676	6	38	44	348	4,114	4,462
	{ Jāghir ...	...	...	...	...	...	...	...	...	...
	Total ...	...	4,676	4,676	6	38	44	348	4,114	4,462
Mitroo Canal ...	{ Government ... 1891-92 ...	...	53,182	53,182	351	63	414	13,336	3,963	17,299
	{ Jāghir ...	...	...	...	...	...	...	...	...	...
	Total ...	...	53,182	53,182	351	63	414	13,336	3,963	17,299
Jamwāh ...	{ Government ... 1891-92 ...	...	4	4	204	84	288	3,467	1,512	4,979
Heranwāh ...	{ Government ... 1891-92 ...	...	116	116	38	5	98	978	228	1,206
Khipta ...	{ Government ... 1891-92 ...	...	173	173	...	...	...	84	3,185	3,489
Thar Canal ...	{ Government ... 1891-92 ...	...	22,316	22,316	6	2	8	1,110	59	1,663
	{ Jāghir ...	...	1,460	1,460	...	...	...	2	63	65
	Total ...	...	23,776	23,776	6	2	8	1,112	612	1,724
	Total, Eastern Nāra District ...	1	81,927	81,928	718	1:2	910	18,147	13,664	32,411
Fuldi ...	{ Government ... 1891-92 ...	10	1,67,692	1,27,702	3,718	2,229	5,528	60,895	8,560	69,455
	{ Jāghir ...	3	126:3	18,616	24	150	974	16,139	2,427	18,457
	Total ...	13	1,46,305	1,46,318	4,032	2,479	6,502	77,025	10,887	87,912
Other Canals ...	{ Government ... 1891-92 ...	...	9,852	9,852	544	32	576	6,545	367	6,912
	{ Jāghir ...	...	141	141	1	...	1	701	...	701
	Total ...	...	9,993	9,993	545	32	577	7,246	367	7,613
	Total, Fuldi Canal District ...	13	1,56,298	1,56,311	4,577	2,502	7,079	84,371	11,254	95,625

Crops.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
3	59 118	62 118	108 100	3,644 2,111	5,753 2,241	3,336 5,512	21,953 17,828	25,339 25,200
3	177	160	203	6,785	5,993	8,698	39,861	43,559
7	34	41	173	2,617	2,790	2,331	11,767	13,398
5	490	405	1,016	35,439	37,955	15,584	82,946	1,08,930
2	130	132	1,694	8,732	10,346	3,343	13,347	16,980
...	6	6	352	1,775	1,927	1,062	3,845	4,977
7	535	543	3,372	45,906	49,323	20,389	1,10,138	1,30,527
6	230	256	3	392	393	35	782	817
23	997	1,020	3,756	54,750	58,506	31,353	1,62,548	1,63,901
231	722	933	127	1,057	1,184	8,009	37,890	35,859
25	73	101	...	20	104	383	1,813	2,190
259	785	1,054	127	1,077	1,204	8,392	29,663	38,055
33	124	157	897	3,083	3,980	11,903	37,006	48,909
3	4	7	121	351	472	1,164	3,830	3,994
36	123	164	1,018	3,434	4,452	12,167	39,834	52,003
286	923	1,218	1,145	4,511	5,656	20,359	69,499	90,068
55	247	303	1,615	8,518	10,163	6,675	46,414	53,089
7	11	18	52	112	164	563	928	1,431
62	238	320	1,697	8,630	10,327	7,178 Includess Dubari.	47,342	54,520
67	534	451	315	3,589	3,901	2,527	1,72,084	1,75,211
...	6	5	...	56	56	...	3,740	3,710
67	38	456	312	3,645	3,957	2,527	1,78,424	1,80,551
129	147	176	2,009	12,275	14,284	9,705	2,25,766	2,35,411
473	174	646	701	2,331	3,032	26,993	1,10,440	1,37,433
6	14	20	6	206	212	1,237	9,498	10,675
479	187	666	707	2,537	3,244	28,200	1,19,908	1,48,108
3	13	16	3	3	6	338	3,006	3,694
4	31	25	11	4	15	2,410	2,006	4,432
4	4	8	9	15	24	1,717	846	2,563
1	...	1	35	...	5	5,908	617	6,625
...	...	...	1	...	...	550	...	550
1	...	1	35	3	38	2,558	617	6,155
4	...	4	29	2	31	6,036	2,544	8,580
...	...	...	...	...	...	225	...	223
4	...	4	29	2	31	6,239	2,544	8,803
...	...	...	5	...	5	614	134	648
495	225	729	799	2,564	3,363	45,263	1,20,601	1,74,323
1	4	5	37	1	38	89	5	94
...	...	...	...	...	...	10	...	10
1	4	5	37	1	38	99	5	101
94	2,829	2,922	29	189	218	477	11,845	12,322
...	...	...	...	...	...	...	...	...
94	2,829	2,922	29	189	218	477	11,845	12,322
9,913	3,221	13,134	2,534	1,730	4,264	26,121	12,159	88,283
...	...	...	...	...	...	...	...	...
9,913	3,221	13,134	2,534	1,730	4,264	26,121	12,159	88,283
1,157	410	1,567	289	431	520	4,417	2,491	6,908
540	4	544	124	239	342	1,714	302	2,396
75	1,092	1,167	64	338	392	433	4,768	5,221
1,690	2,000	3,129	325	271	596	2,531	23,172	27,709
290	15	305	3	9	35	385	1,543	1,888
1,380	2,945	3,425	358	290	648	2,826	26,715	23,541
13,160	9,604	22,764	3,494	3,178	6,672	36,129	1,06,565	1,43,685
11,977	1,711	13,688	8,763	2,565	11,328	84,833	1,42,815	2,37,701
2,162	383	2,390	2,468	6,522	8,990	21,577	27,930	49,427
14,129	1,949	16,978	11,231	9,087	20,317	1,06,459	1,70,908	2,77,128
296	45	393	550	299	849	7,911	10,392	13,503
16	...	16	9	...	9	754	114	868
312	42	354	535	299	834	8,665	10,706	19,371
14,441	1,991	16,432	11,796	9,356	21,152	1,15,965	1,61,404	2,36,499

RAIL.								
CLASS OF								
Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
6	4,039	4,047	...	16	16	59	6,637	6,696
...	1,058	1,058	...	...	...	31	3,880	3,911
...	...	...	...	...	...	...	...	...
8	5,097	5,105	...	16	16	90	10,517	10,607
58	4,110	4,108	...	55	55	49	2,847	2,896
463	10,196	10,618	45	232	327	1,390	28,910	30,590
4	188	182	...	...	...	284	4,151	4,435
...	94	94	...	5	6	...	869	869
407	10,438	10,905	45	287	332	2,174	33,838	36,104
15	5,764	2,779	7	37	44	...	20	20
518	22,470	22,937	52	305	447	2,813	47,829	49,633
1,938	32,074	34,012	19	130	149	40	716	756
97	3,980	3,177	...	54	54	...	173	173
2,035	35,154	37,189	19	184	203	40	889	929
431	12,568	12,909	14	90	110	67	445	512
11	235	246	...	1	1	...	55	55
442	12,803	13,245	14	97	111	67	500	567
2,477	47,957	50,434	33	231	314	107	1,359	1,496
6,195	24,336	30,531	46	297	343	268	2,561	3,347
...	707	707	...	...	...	49	49	49
6,195	25,043	31,238	46	297	343	986	2,610	3,596
1,065	39,933	41,028	22	210	221	125	12,349	13,374
...	284	284	...	...	...	...	941	941
1,065	40,217	41,312	22	210	321	125	13,190	13,315
7,290	65,260	72,550	68	366	664	1,111	15,890	16,911
13,315	59,446	42,791	488	804	1,290	647	12,877	13,524
1,321	2,559	3,881	72	116	188	5	1,124	1,129
14,096	32,905	46,671	568	920	1,478	652	14,001	14,653
130	1,021	1,171	39	167	206	8	2,987	3,063
143	1,490	1,615	1	59	60	1	280	281
184	925	1,109	15	102	117	1	392	393
709	1,292	1,911	5	200	295	23	44	67
11	10	31	...	...	...	...	77	77
730	1,212	1,382	5	290	295	20	121	144
271	1,847	2,118	41	333	364	14	354	368
41	84	75	...	...	...	...	5	6
312	1,381	2,193	41	323	364	14	359	373
2,171	3,324	5,996	27	89	116	3	92	95
18,349	42,337	60,636	686	1,950	2,636	762	18,233	18,964
549	2,585	3,114	...	...	...	3	52	55
...	4,602	4,602	...	...	...	...	...	...
549	7,167	7,716	...	...	...	3	52	55
233	6,677	6,810	16	25	41	164	6,732	6,946
...	...	...	...	...	...	...	...	...
233	6,577	6,810	16	25	41	164	6,782	6,946
8,964	15,710	24,764	279	160	439	1,109	3,327	4,436
...	...	...	...	...	...	...	...	...
8,964	15,710	24,764	279	160	439	1,109	3,327	4,436
431	21	452	...	...	...	12	84	96
103	161	335	...	...	...	10	17	27
21	850	874	...	1	1	...	1,450	1,460
537	1,731	2,291	4	34	38	520	2,945	3,465
2	79	15	...	...	...	67	414	471
569	1,807	2,366	4	34	38	577	3,379	3,936
10,922	32,206	43,218	299	220	519	1,875	16,071	16,946
692	10,624	11,316	79	3,126	3,205	263	19,659	19,922
56	1,674	1,134	31	595	916	26	2,014	2,090
148	11,702	12,450	100	4,031	4,121	338	21,675	22,012
27	1,074	1,101	2	7	9	...	167	167
...	24	24	...	...	...	...	...	...
27	1,098	1,125	2	7	9	...	167	167
775	12,800	13,575	102	4,028	4,130	399	21,840	22,179

Crops.						Total Cultivation.			Remarks.
Other crops.			Total Rabi.			Lift.	Flow.	Total.	
Lift.	Flow.	Total.	Lift.	Flow.	Total.				
359	359	359	67	11,051	11,116	3,453	33,004	36,457	Dubari cultivation, Balance 60,130.
165	165	165	31	5,103	5,134	5,948	22,991	28,934	
524	524	524	98	16,154	16,252	3,796	56,015	64,811	
3	720	732	110	7,741	7,851	2,341	19,568	21,849	Includes 2,566 Dubari.
70	8,722	8,792	2,468	48,070	50,532	18,452	1,41,016	1,59,468	Dubari cultivation, Balance 1,74,719.
400	671	1,071	698	5,010	5,693	4,031	18,359	22,388	
29	29	29	997	997	1,062	4,842	5,904	13,041	
470	9,422	9,822	3,156	54,077	57,233	23,845	1,64,215	1,87,750	
3	220	233	25	3,057	3,082	60	3,839	3,899	Dubari cultivation, Balance 3,717.
476	10,505	11,391	3,359	81,029	84,418	34,742	2,43,577	2,78,319	* Dubari cultivation 20,470.
38	1,224	1,262	2,735	34,144	36,178	10,044	61,994	72,038	Dubari cultivation, Balance 67,825.
38	46	46	27	3,332	3,450	480	5,166	5,646	
38	1,270	1,309	2,132	37,497	39,629	10,524	67,106	77,084	
275	1,634	1,909	787	14,743	15,530	11,790	51,749	63,539	Dubari cultivation, Balance 67,825.
275	43	43	11	324	345	1,175	3,164	4,339	
275	1,677	1,652	798	15,077	15,875	12,965	54,913	67,578	
313	2,947	3,360	2,930	52,574	55,504	23,489	1,22,078	1,45,562	
157	1,860	2,137	7,394	29,174	36,558	14,059	75,588	89,647	Dubari cultivation, Balance 89,343.
10	43	33	10	799	899	512	1,727	2,940	
167	2,023	2,190	7,394	29,973	37,367	14,572	77,315	91,887	
148	3,455	1,380	57,788	59,178	3,917	2,30,473	2,34,329	7,092	Dubari cultivation, Balance 2,39,369.
148	127	1,390	1,352	7,092	7,092				
148	5,582	1,390	59,140	60,530	3,917	2,37,564	2,41,481	2,115	
311	437	7,772	8,784	89,118	97,897	18,489	3,14,879	3,33,808	† Includes Aral.
910	3,466	3,466	15,338	46,182	61,570	42,381	1,56,622	71,90,003	
90	101	241	1,839	3,810	5,448	2,935	13,448	16,118	
1,000	3,307	4,207	16,576	50,132	67,008	45,076	1,70,040	2,15,116	
2	97	97	197	4,272	4,469	795	7,378	8,073	
2	28	28	150	1,832	1,982	2,666	3,838	6,404	
39	19	19	200	1,438	1,638	1,917	2,384	4,201	
39	397	436	776	1,933	2,709	5,784	2,550	8,334	
39	11	87	98	581	581	87	648	648	
39	397	436	787	2,020	2,807	6,345	2,637	8,932	
3	186	171	331	2,690	3,021	6,307	5,234	11,601	
1	42	89	42	89	81	265	39	304	
6	166	172	373	2,729	3,102	6,032	5,273	11,905	
52	2,090	2,132	2,223	6,066	8,339	2,767	6,220	5,937	
1,099	5,990	7,039	20,836	68,509	89,345	66,098	1,97,670	2,63,668	
148	148	148	552	2,765	3,317	641	2,770	3,411	
148	148	148	552	4,602	4,602	10	4,602	4,621	
76	3,647	3,723	490	17,031	17,520	966	7,372	8,023	
76	3,647	3,723	489	17,031	17,520	966	28,576	29,812	
82	1,146	1,228	10,434	20,343	30,777	36,558	82,502	1,19,060	
82	1,146	1,228	10,434	20,343	30,777	36,558	82,502	1,19,060	
1	3	3	443	109	551	4,860	2,399	7,439	
26	97	133	166	141	347	1,010	743	2,053	
222	1,132	1,354	57	2,401	2,438	400	7,189	7,879	
222	1,132	1,354	1,303	5,845	7,148	3,584	31,017	34,651	
222	1,132	1,354	50	457	549	354	2,030	2,354	
407	6,176	6,583	13,593	53,763	67,266	49,623	1,62,328	2,11,951	
887	6,895	7,782	1,921	40,304	42,225	8,774	1,38,152	2,69,928	
478	994	1,412	631	4,951	5,582	32,208	32,901	55,099	
1,355	7,559	9,324	2,552	45,235	47,807	1,08,942	2,15,953	3,24,335	
10	116	135	48	1,364	1,412	7,969	11,956	19,915	
19	29	29	48	53	53	754	167	921	
19	145	164	48	1,417	1,465	8,713	12,123	20,836	
1,354	8,004	9,353	2,600	46,672	49,272	1,17,695	2,23,076	3,45,771	

			KHARIF.								
Canals.	Years.	Class of									
		Rice.			Jowari.			Bajrl.			
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
Mehrabwah	{ Government ... Jaghir ...	1891-92 " "	...	50 ... 50	50 ... 50	6,736 ... 6,736	433 59 491	7,168 59 7,227	2,540 ... 2,540	62 1 63	2,602 1 2,603
Nasrat	{ Government ... Jaghir ...	1891-92 " "	1	293 ... 293	294 ... 294	10,838 197 11,030	4,041 114 4,155	14,874 311 15,185	1,248 ... 1,248	147 6 153	1,395 6 1,401
Naolaki	{ Government ... Jaghir ...	1891-92 " "	13	401 128 13	414 128 542	21,290 629 21,809	6,758 742 7,500	28,038 1,271 29,309	4,643 62 4,705	116 29 153	5,153 91 5,250
Dambro	{ Government ... Jaghir ...	1891-92 " "	20	47 60 20	67 60 117	5,923 437 6,360	539 293 772	6,462 670 7,132	1,864 77 1,943	98 83 161	1,964 140 2,104
Dadwah	{ Government ... Jaghir ...	1891-92 " "	...	602 614 ...	602 614 1,216	8,548 1,952 10,500	1,296 707 2,063	9,844 2,659 12,503	4,087 718 4,805	533 65 603	4,625 783 5,409
Renwah	{ Government ... Jaghir ...	1891-92 " "	...	162 ... 162	162 ... 162	1,931 4 1,985	128 ... 28	2,109 ... 2,113	9,370 17 9,387	464	9,834 17 9,851
Alibhar Kacheri	{ Government ... Jaghir ...	1891-92 " "	...	...	...	727 55 782	3 ... 3	790 65 785	6,177 83 7,010	...	6,194 635 7,029
Great Marak	{ Government ... Jaghir ...	1891-92 " "	...	82 8 90	82 8 90	2,774 502 3,276	110 ... 110	2,884 502 3,386	27,955 4,187 32,142	...	28,678 4,240 32,918
Ghāro Mahnuda	{ Government ... Jaghir ...	1891-92 " "	...	183 ... 183	183 ... 183	3,110 1,573 4,685	144 5 149	3,254 1,578 4,832	29,713 7,902 37,615	1,268 107 1,375	30,991 8,009 38,990
Karl Shumali	{ Government ... Jaghir ...	1891-92 " "	...	...	...	1,315 309 1,518	2 ... 2	1,317 303 1,620	19,981 5,832 24,813	57 ... 57	19,933 5,832 24,870
Nasir	{ Government ... Jaghir ...	1891-92 " "	...	3 ... 3	3 ... 3	1,161 48 1,209	1 ... 1	1,162 46 1,210	16,988 1,162 18,150	23 ... 23	17,011 1,162 18,173
Sarfraz	{ Government ... Jaghir ...	1891-92 " "	...	39 1 40	39 1 40	785 66 831	53 7 60	818 73 891	14,226 3,369 17,595	433 111 594	14,709 3,480 18,189
Other canals	{ Government ... Jaghir ...	1891-92 " "	25	107 4 111	132 4 136	9,759 685 10,434	1,132 36 1,168	10,871 731 11,602	8,239 454 8,493	631 8 649	8,820 462 9,282
Total Hyderabad Canal District			29	2,754	2,813	81,153	16,542	97,695	170,646	5,423	1,76,068
Canals north of Kotri.	{ Government ... Jaghir ...	1891-92 " "	...	875 ... 875	875 ... 875	1,781 195 1,976	216 ... 216	1,997 183 2,180	1,713 177 1,890	39 ... 39	1,752 177 1,929
Kalri	{ Government ... Jaghir ...	1891-92 " "	...	6,101 290 6,361	6,101 260 6,361	629 ... 629	19 ... 19	648 ... 648	3,280 10 3,290	143 15 158	3,423 25 3,448
Baghar	{ Government ... Jaghir ...	1891-92 " "	6	337 429 6	10,343 439 10,766	...	10 ... 10	6,202 603 6,805	239 35 274	6,441 638 7,079	
Uchita	{ Government ... Jaghir ...	1891-92 " "	10	9,913 ... 10	9,923 ... 9,913	...	...	...	131 ... 131	3 ... 3	134 ... 134

Crops.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
121	8	129	1,098	665	1,763	10,495	1,317	11,712
...	...	...	3	108	111	3	188	171
121	8	129	1,101	773	1,874	10,498	1,385	11,883
233	62	815	1,432	2,018	3,450	13,747	6,581	20,328
7	8	15	1	1	2	205	129	334
240	90	330	1,433	2,019	3,452	13,952	6,710	20,662
216	86	232	7,001	3,142	10,143	33,153	10,853	44,006
11	7	18	45	200	245	647	1,106	1,753
227	43	270	7,046	3,342	10,388	33,800	11,059	45,759
28	1	20	789	69	858	8,606	754	9,360
...	...	...	94	42	136	608	388	996
28	1	29	808	111	919	9,214	1,142	10,356
65	5	70	5,247	3,030	8,277	17,947	5,471	23,418
23	818	341	966	455	1,421	3,659	2,159	5,819
88	323	411	8,213	3,485	9,698	21,606	7,630	29,236
1,400	32	1,432	2,998	154	3,152	15,749	940	16,689
8	...	8	14	...	14	43	...	43
1,408	32	1,440	3,012	154	3,166	15,792	940	16,732
1,088	...	1,088	1,144	2	1,146	9,134	26	9,160
259	...	259	384	...	384	1,538	...	1,538
1,347	2	1,349	1,528	2	1,530	10,067	26	10,093
9,701	337	10,038	4,371	276	4,647	44,801	1,628	46,429
1,468	17	1,485	925	5	930	6,772	78	6,850
11,161	349	11,510	4,991	281	5,272	51,573	1,606	53,179
13,961	449	14,410	3,360	144	3,504	49,844	2,168	52,012
2,730	16	2,746	1,859	1	1,860	13,501	129	13,630
16,391	465	16,856	5,016	145	5,161	63,785	2,297	66,082
5,854	22	5,976	2,558	14	2,572	25,708	95	25,803
2,593	...	2,593	506	...	506	9,294	...	9,294
8,647	22	8,569	3,124	14	3,138	38,002	95	38,097
4,640	115	5,055	1,806	6	1,812	24,895	148	25,043
534	...	534	300	...	300	2,044	...	2,044
5,474	115	5,589	2,106	6	2,112	28,939	148	29,087
3,401	165	3,566	1,800	47	1,847	20,199	787	20,986
855	21	856	281	10	291	4,551	150	4,701
4,236	186	4,422	2,081	57	2,138	24,743	637	25,380
155	11	166	1,653	451	2,084	19,191	2,282	22,073
11	...	11	138	1	139	1,313	49	1,362
196	11	177	2,786	452	2,238	21,104	2,331	23,435
49,437	1,647	51,084	40,300	10,841	51,141	3,41,595	37,206	3,78,801
33	9	42	108	8	116	3,635	1,147	4,782
2	...	2	6	...	6	380	...	380
35	9	44	114	8	122	4,015	1,147	5,162
4	...	4	971	65	1,036	4,884	6,328	11,212
...	...	...	20	23	43	30	298	328
4	...	4	981	88	1,079	4,914	6,626	11,640
...	...	...	1,448	92	1,540	7,656	10,678	18,334
...	...	...	47	25	72	650	470	1,120
...	...	...	1,495	118	1,613	8,306	11,108	19,474
...	...	...	237	234	471	378	10,160	20,528
...	...	...	...	...	...	...	...	...
...	...	...	237	234	471	378	10,160	20,528

CLASS OF

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
1,095 2	138	1,233 2	11	2	13	108 3	8	116 3
1,097	138	1,235	11	2	13	111	8	119
2,130 6	1,787 162	3,717 168	34 1	16 2	50 3	207 1	86 34	293 65
2,136	1,749	3,835	35	18	53	208	120	328
2,352 32	2,280 74	4,632 106	53 1	23 4	76 5	295 16	191 11	486 27
2,384	2,354	4,738	54	27	81	311	202	513
1,152 15	686	1,838 13	31	2	33	...	85	85 3
1,165	686	1,851	31	2	33	3	85	88
705	1,501 146	2,206 146	40	133 24	173 22	608	1,046 48	1,655 58
705	1,647	2,352	40	157	197	609	1,084	1,693
5	256	261	...	1	1	7	26	33
5	256	261	...	1	...	7	26	...
...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	49	...	41
61 2	75 1	136 3	...	...	...	43 61	137 23	180 84
63	76	139	...	...	...	104	160	264
264	744 35	1,008 35	...	...	...	158 20	617 175	775 195
264	778	1,013	...	...	...	178	792	970
407 1	210	607 1	3	...	3	87 7	78	165 7
408	200	608	3	...	3	94	78	172
20	206 3	226 3	...	...	...	133	60	193
20	209	229	...	...	...	133	60	193
14 33	404 31	418 64	1	5	6	90 136	160 9	250 145
47	435	482	1	5	6	225	169	395
2,805 6	2,003 136	4,806 142	71	53 2	124 2	236	729 136	965 126
2,811	2,229	5,040	71	85	156	236	855	1,091
11,105	10,758	21,863	246	207	543	2,231	3,639	5,890
7	1,679 524	1,896 524	...	...	...	10	753 42	763 42
7	2,203	2,210	...	...	...	10	785	895
...	7	7	24	865 10	889 19	...	100	100
...	7	7	24	875	899	...	100	100
...	...	...	53	4,015 933	4,068 933	...	591 279	591 210
...	...	...	53	4,008	5,051	...	801	801
...	...	...	3	146	149	18	24	42
...	...	...	3	146	149	18	24	42

1891-92—continued.

Crops.						Total Cultivation.			Remarks.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
..... 15	94 8	94 23	1,214 20	242 8	1,456 28	11,799 22	1,459 176	13,168 199	
15	102	117	1,234	250	1,484	11,732	1,635	13,367	
..... 4	202 5	202 9	2,371 12	1,891 203	4,262 313	16,118 217	8,472 332	24,590 549	
4	207	211	2,383	2,094	4,477	16,335	8,504	25,139	
114 2	68 3	182 8	2,914 51	2,562 92	5,376 143	35,947 688	13,415 1,199	49,382 1,896	
116	71	187	2,865	2,654	5,519	36,965	14,913	51,273	
..... 2	2 15	2 17	1,183 18	775 15	1,958 33	9,789 628	1,529 403	11,318 1,029	
2	17	19	1,201	790	1,991	10,415	1,932	12,347	
26 20	310 87	336 107	1,390 20	2,990 295	4,379 315	19,327 8,679	8,461 2,454	27,788 6,133	
46	307	413	1,490	3,285	4,685	23,096	10,915	33,921	
..... 62	62	62	12	345	357	15,761 43	1,285	17,446 43	
..... 62	62	62	12	345	357	15,804	1,285	17,089	
53 1	34 1	87 1	56 39	34	90 39	9,196 1,572	60	9,250 1,572	
54	34	88	95	34	129	10,762	60	10,822	
86 16	33 9	419 110	189 79	546 113	735 197	44,990 8,551	2,074 196	47,064 7,047	
101	419	529	268	664	932	51,341	2,270	53,111	
125 76	2,405 13	2,136 219	547 96	3,866 333	3,913 449	50,391 13,957	5,534 443	55,925 14,439	
201	2,148	2,349	613	3,719	4,332	64,318	6,916	70,364	
79 24	474	533 24	576 32	752	1,328 32	29,384 9,320	847	30,131 9,329	
103	474	577	608	752	1,360	33,610	847	39,457	
213 32	610 3	823 35	356 32	870 6	1,232 38	25,251 2,070	1,024 6	26,257 2,082	
245	613	658	388	882	1,270	27,327	1,020	28,357	
128 51	360 22	498 73	323 200	929 62	1,162 282	20,425 4,771	1,716 212	22,141 4,983	
179	332	561	453	991	1,444	25,196	1,923	27,124	
56	313 138	374 138	3,168 6	3,223 402	6,391 406	22,059 1,519	5,505 451	23,464 1,770	
56	456	512	3,174	3,625	6,799	24,278	5,356	30,234	
1,122	5,391	6,513	14,724	20,085	34,809	2,86,319	57,291	4,13,610	
7 4	302 21	209 25	24 4	2,734 587	2,758 591	8,669 784	3,841 587	7,549 971	
11	323	334	28	3,321	3,349	4,043	4,463	8,511	
33	532 5	565 8	57	1,504 15	1,561 15	4,941 30	7,332 213	12,773 343	
33	537	578	57	1,519	1,576	4,971	8,115	13,116	
47 31	1,786 49	1,833 80	100 31	6,592 1,242	6,492 1,273	7,756 681	17,070 1,732	24,826 2,413	
78	1,935	1,913	131	7,434	7,765	8,237	18,502	27,239	
78	588	664	97	758	855	475	10,908	11,383	
78	588	664	97	758	855	475	10,908	11,383	

CROP RETURN,

KHARIF.

CLASS OF

Canals	Years.	CLASS OF									
		Rice.			Jowari.			Bajri.			
		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
Canals in Tatta	{ Government ...	1891-92	2	6,305	6,307	...	...	...	571	46	617
	{ Jāghir ...	...	...	687	687	...	...	...	188	...	186
	Total	...	2	6,992	6,994	...	...	...	707	46	753
Shal Canal	{ Government ...	1891-92	...	2,317	2,317	...	...	...	70	...	70
	{ Jāghir ...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	2,317	2,317	...	...	...	70	...	70
Pinyari Canal	{ Government ...	1891-92	105	59,464	59,569	92	13	105	2,687	51	2,708
	{ Jāghir ...	...	...	1,803	1,803	...	...	...	85	...	95
	Total	...	105	61,267	61,372	92	13	105	2,752	51	2,803
Canals in Mirpur / Government Baboro	{ Government ...	1891-92	...	9,681	9,681	118	23	141	3,091	128	3,129
	{ Jāghir ...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	9,681	9,681	118	23	141	3,091	128	3,129
Canals in Suikwal	{ Government ...	1891-92	...	5,538	5,538	...	...	...	435	8	443
	{ Jāghir ...	...	...	232	232	...	...	...	13	2	15
	Total	...	...	5,890	5,890	...	...	...	448	10	458
Satta	{ Government ...	1891-92	37	5,610	5,647	13	11	24	2,922	15	2,987
	{ Jāghir ...	...	...	280	239	...	...	...	...	...	...
	Total	...	37	5,840	5,877	13	11	24	2,922	15	2,987
Canals in Jati	{ Government ...	1891-92	...	1,389	1,389	11	...	17	...	2	471
	{ Jāghir ...	...	...	88	88	...	...	...	19	...	19
	Total	...	...	1,477	1,477	11	6	17	488	2	490
Khandta	{ Government ...	1891-92	...	5,013	5,013	...	9	9	18	14	32
	{ Jāghir ...	...	...	139	139	...	...	...	...	...	...
	Total	...	...	5,152	5,152	...	9	9	18	14	32
Kokewari	{ Government ...	1891-92	8	13,567	13,575	...	...	...	25	...	25
	{ Jāghir ...	...	...	...	...	...	...	...	...	...	...
	Total	...	8	13,567	13,575	...	...	...	25	...	25
Canals in Shāh- / Government bandar	{ Government ...	1891-92	...	1,763	1,763	3	...	3	177	...	177
	{ Jāghir ...	...	...	233	233	...	...	...	...	...	...
	Total	...	...	2,015	2,015	3	...	3	177	...	177
Bunds, Left Bank	{ Government ...	1891-92	...	684	684	...	...	...	...	...	...
	{ Jāghir ...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	684	684	...	...	...	...	...	...
Bunds, Right Bank	{ Government ...	1891-92	...	298	298	...	...	...	...	...	...
	{ Jāghir ...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	298	298	...	...	...	...	...	...
Total, Karachi Canals District		...	168	1,43,095	1,43,263	2,842	307	3,149	22,654	810	23,464
Grand Total for Sind, 1891-92		...	271	6,53,689	6,53,960	1,79,569	2,41,881	4,21,450	3,04,237	49,179	3,53,416

Crops.

Cotton.			Other Crops.			Total Kharif.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	...	...	85	86	171	638	6,437	7,065
...	...	...	3	...	3	139	697	836
...	...	...	88	86	174	797	7,124	7,921
...	...	...	...	...	...	...	2,387	2,387
...	...	...	...	...	...	...	2,357	2,387
6	...	6	1,701	420	1,721	4,161	69,948	64,109
...	...	...	19	5	24	114	1,808	1,922
6	...	6	1,820	425	1,745	4,275	61,750	66,031
6	...	6	463	51	514	3,588	9,883	13,471
...	...	...	...	...	...	...	...	...
6	...	6	463	51	514	3,588	9,883	13,471
...	...	...	18	5	23	453	5,671	6,124
...	...	...	...	...	...	19	234	247
...	...	...	18	5	23	466	5,905	6,371
...	...	...	525	273	798	3,497	5,909	9,406
...	...	...	...	30	30	...	960	260
...	...	...	525	303	828	2,497	6,169	9,666
...	...	...	32	17	49	512	1,414	1,926
...	...	...	...	...	...	19	88	107
...	...	...	32	17	49	531	1,502	2,033
...	...	...	44	242	286	62	5,275	5,347
...	...	...	...	...	...	139	...	159
...	...	...	44	242	286	62	5,417	5,479
...	...	...	85	77	162	118	13,644	13,762
...	...	...	...	...	...	...	...	...
...	...	...	85	77	162	118	13,644	13,762
...	...	...	23	18	41	203	1,790	1,993
...	...	...	...	4	4	...	257	267
...	...	...	23	22	45	203	2,037	2,240
...	...	...	...	...	...	...	...	...
...	...	...	41	...	41	41	684	725
...	...	...	41	...	41	41	684	725
...	...	...	...	...	...	...	298	298
...	...	...	...	...	...	...	298	298
51	8	60	5,476	1,676	7,152	31,191	1,45,897	1,77,068
78,031	16,043	94,074	68,735	99,181	1,67,926	6,30,880	10,59,948	16,90,826

RAB.

CLASS OF

Wheat.			Barley.			Oil-seeds.		
Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
...	271	271	5	615	620	...	107	107
...	...	...	...	188	188	...	8	8
...	271	271	5	803	808	...	115	115
...	497	497	...	...	...	...	18	18
...	...	...	...	...	...	...	...	...
...	497	497	...	...	...	...	18	18
...	...	...	...	...	...	...	...	...
3	47	50	...	563	563	20	855	875
...	...	...	...	47	47	...	10	10
3	47	50	...	610	610	20	865	885
...	...	...	...	...	...	...	...	...
...	128	128	...	258	258	...	318	318
...	...	...	...	...	...	...	...	...
...	128	128	...	258	258	...	318	318
...	...	...	...	...	...	...	...	...
...	...	...	...	592	592	...	457	457
...	...	...	...	...	...	...	51	51
...	...	...	...	592	592	...	509	509
...	...	...	...	...	...	...	...	...
...	...	...	...	49	49	5	89	94
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	103	103	...	14	14
...	...	...	...	...	...	...	...	...
...	...	...	...	103	103	...	14	14
...	...	...	...	...	...	...	...	...
...	...	...	...	19	19	...	35	35
...	...	...	...	...	...	...	...	...
...	...	...	...	19	19	...	35	35
...	...	...	...	...	...	...	...	...
...	...	...	5	171	176	...	48	48
...	...	...	...	...	...	...	...	...
...	...	...	5	171	176	...	48	48
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	5	5
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	5	5
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
10	3,153	3,163	90	8,624	8,714	53	3,785	3,788
51,476	3,36,370	2,88,448	1,576	16,391	17,967	8,751	1,27,026	1,35,771

1891-92—concluded.

CROPS.						Total Cultivation.			REMARKS.
Other Crops.			Total Rabi.						
Lift.	Flow.	Total	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
.....	472	472	5	1,465	1,470	863	7,992	8,565	
.....	59	59	.....	255	255	139	942	1,081	
.....	531	531	5	1,720	1,725	802	8,844	9,646	
.....	24	24	.....	539	539	.....	2,926	2,926	
.....									
.....	24	24	.....	539	539	.....	2,925	2,925	
140	486	626	163	1,951	2,114	4,324	61,899	66,223	
.....	12	12	.....	69	114	1,877	1,991	1,991	
140	498	638	163	2,020	2,183	4,438	63,776	68,214	
.....									
.....	433	433	.....	1,137	1,137	3,588	11,020	14,608	
.....									
.....	433	433	.....	1,137	1,137	3,588	11,020	14,608	
.....	29	29	.....	1,078	1,078	453	6,749	7,827	
.....	8	8	.....	59	59	13	208	306	
.....	37	37	.....	1,137	1,137	466	7,042	7,508	
7	20	36	12	167	170	3,509	6,076	9,585	
.....	.....	.....	.....	.....	.....	.....	260	260	
.....	.....	36	12	167	179	3,509	6,336	9,845	
.....									
.....	.....	33	.....	150	150	512	1,564	2,076	
.....	.....	.....	.....	.....	.....	19	88	107	
.....	.....	33	.....	150	150	531	1,632	2,163	
.....									
.....	13	13	.....	67	67	62	5,345	5,407	
.....	.....	.....	.....	.....	.....	.....	139	139	
.....	13	13	.....	67	67	62	5,484	5,546	
.....									
.....	535	535	5	754	759	128	14,398	14,521	
.....									
.....	535	535	5	754	759	123	14,398	14,521	
.....									
.....	46	46	.....	51	51	203	1,891	2,034	
.....	.....	.....	.....	.....	.....	.....	257	257	
.....	46	46	.....	51	51	203	2,038	2,291	
.....									
.....	.....	.....	.....	.....	.....	41	684	725	
.....	.....	.....	.....	.....	.....	41	684	725	
.....	.....	.....	.....	.....	.....	.....	296	299	
.....	.....	.....	.....	.....	.....	.....	296	298	
345	5,402	5,907	498	99,974	21,472	31,659	1,06,571	1,98,560	
5,461	52,352	57,703	67,264	4,82,719	4,99,983	6,93,144	14,92,665	21,90,810	
.....	.....	.....	.....	.....	.....	.....	.....	25,179	
.....	.....	.....	.....	.....	.....	.....	.....	*21,65,681	

Deduct 25,179 dubari,
Balance 21,65,681.

Deduct 25,179 dubari.
Balance 21,65,681.

* Made up as under:—

Government	...	...	...	19,49,717
Foreign	...	...	...	50,523
Jaqbir	...	...	...	1,65,192
				<u>21,65,681</u>

H. M. THOMPSON, M.Inst. C.E.,
Superintending Engineer in Sind.

TABLE IX.

Rainfall in the Province of Sind for 1891-92.

Collectorate and Districts.			April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total, 1891-92.	Total, 1890-91.
			In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.
UPPER SIND.	B e g á r i Canals.	Jacobabad ...	0 27	0 11	0 05	0 35	0 02	0 04	...	...	...	0 08	0 02	...	0 94	7 3
		Kashmor... ..	0 62	0 12	...	0 63	...	...	0 8	...	...	0 34	...	...	1 81	2 40
		Thul	0 24	0 59	0 04	0 53	0 13	...	...	...	...	0 14	0 02	...	2 04	5 75
		Shahdádpur ...	0 6	0 15	...	0 12	...	0 07	...	...	...	0 08	0 69	...	1 17	7 11
SHIKÁRPUR COLLECTORATE.	Shikárpur Canals.	Ubauro	0 64	0 03	...	...	...	2 43	...	...	...	0 42	...	...	3 52	4 54
		Mirpur	0 67	0 30	0 18	0 09	...	...	...	...	...	0 28	...	...	1 52	8 58
		Ghotki	0 19	0 17	0 10	0 14	0 05	0 05	...	...	...	0 24	...	...	0 94	7 97
		Rohri	0 43	0 12	...	1 33	...	0 14	...	...	...	0 27	0 03	...	2 32	11 28
		Shikárpur	...	...	...	0 13	...	0 19	...	...	...	0 20	0 17	...	0 69	10 13
		Sukkur	0 37	0 07	...	0 25	...	0 07	...	...	...	0 26	0 01	...	1 02	14 94
	Ghár Canals.	Garh-yásin ...	...	...	...	0 53	...	0 15	...	...	...	0 25	0 13	...	1 06	12 51
		Rato-dero	0 4	0 16	...	...	...	...	...	...	...	0 04	0 18	...	0 42	8 99
		Lárkhána	0 2	0 22	...	0 56	...	...	...	...	...	0 05	0 15	...	1 0	6 0
		Kambar	...	0 37	...	1 0	...	...	...	...	...	0 10	0 25	...	1 72	6 87
		Bákráni	...	0 48	...	...	...	0 79	...	...	...	...	0 12	...	1 39	6 63
		Mehar	...	0 12	...	1 99	...	0 70	...	...	...	0 06	0 10	...	2 97	3 95
THAR AND PAKISTAN.	Eastern Nárs Canals.	Wárah	...	0 31	...	2 60	...	...	...	...	...	...	0 39	...	3 30	9 46
		Khairpur Náthesahí ...	...	...	...	0 83	...	1 29	...	...	...	...	...	...	2 12	5 36
		Nagar	0 22	0 05	...	4 01	2 06	1 61	...	...	...	0 14	...	...	8 09	9 28
		Mitti	...	0 09	...	2 12	...	0 50	...	...	...	...	...	...	...	...
	Hydera bad Canals.	Umarkot... ..	...	0 22	...	1 20	...	0 64	...	...	...	0 16	...	...	...	...
		Khipra	...	...	...	0 09	0 17	0 25	...	...	...	0 30	...	...	...	...
		Kandiáro	...	...	...	...	...	0 05	...	...	...	...	...	...	...	...
		Nausháro	...	0 14	...	...	...	0 20	...	...	...	...	...	...	...	...
	Hydera bad Canals.	Tharu Shahí ...	...	0 20	...	0 08	...	0 55	...	...	...	0 06	...	...	...	...
		Moro	...	1 28	...	0 40	...	0 30	...	...	...	0 05	...	...	...	...
		Sákrand	...	0 10	...	...	...	0 08	...	...	...	0 03	...	...	...	...
		Hála	...	0 07	...	...	...	...	...	...	...	0 01	...	...	...	...
		Shahdádpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Tando Adam ...	...	0 05	...	...	...	...	...	...	...	...	...	...	...	7 65
HYDERABAD COLLECTORATE.	Fuleli Canals.	Tando Alahyár... ..	...	0 16	...	0 04	...	...	...	...	...	0 04	...	...	0 99	10 23
		Mirpur Khás ...	...	...	...	0 07	0 45	0 04	...	...	...	0 16	...	...	0 30	10 0
		Hyderabad	...	...	...	0 33	...	...	...	...	...	0 12	...	...	0 45	8 83
		Mohab Dero	...	...	...	0 36	...	1 20	...	...	...	0 10	...	...	1 56	16 55
		Tando Bago	...	...	...	1 58	...	0 78	...	...	...	0 28	...	...	2 64	9 41
		Badin	...	...	...	1 51	...	1 83	...	...	...	0 68	...	...	4 02	11 27
	Karachi Canals.	Tando Muham-mad Khán ...	...	...	...	0 45	...	0 09	...	...	...	0 11	...	...	0 65	16 40
		Daddá	...	0 39	...	0 20	...	0 21	...	...	...	0 09	0 07	0 02	0 98	4 75
		Joli	...	0 23	...	0 26	...	0 60	...	...	...	0 08	0 02	...	1 19	6 84
		Sehwán	...	0 61	...	0 10	...	1 40	...	...	...	0 05	...	...	2 16	5 13
		Mánghand	...	0 48	0 10	...	...	0 03	...	...	...	0 03	...	...	0 64	9 06
		Kotri	...	...	...	0 09	...	0 04	...	...	...	0 04	...	...	0 17	12 96
KARACHI COLLECTORATE.	Karachi Canals.	Bula Khá's	...	...	...	...	...	...	...	...	...	...	...	...	...	12 98
		Tando	...	...	...	0 02	0 55	0 04	...	...	...	0 13	...	...	0 74	...
		Jerrach	...	0 36	...	0 66	...	0 22	...	...	...	0 10	...	...	1 34	10 90
		Táktó	...	...	...	...	...	1 82	...	...	...	0 17	...	...	1 99	11 38
		Sákró	...	...	...	...	...	2 29	...	...	...	0 16	...	...	2 45	11 02
		Mirpur Batoro ...	...	...	...	1 70	...	0 02	...	...	...	0 10	...	...	1 82	10 42
	Karachi Canals.	Sujáwal	...	...	...	0 30	...	0 10	...	...	...	0 08	...	...	1 08	9 32
		Sháhbándar	...	...	...	2 0	...	0 57	...	...	...	0 04	...	...	2 61	9 07
		Kotri Ghorábári ...	...	...	...	0 13	...	0 43	...	...	...	0 13	...	...	0 71	9 01
		Keti	...	...	...	...	0 06	0 51	...	...	...	0 30	...	...	0 87	14 34
		Mughalbin	...	...	...	1 07	...	0 55	...	...	...	0 15	...	...	1 77	9 02
		Karachi	...	...	...	...	...	0 31	...	...	...	0 35	...	0 07	0 73	13 30

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Memorandum showing the amount of Loss to Canals on account of difference between Assessments of Water-rates on Jágíir Lands, and Assessments at the ordinary rates in force for Government Lands.

	To end of 1890-91.	During 1891-92.	To end of 1891-92.	Remarks.
MAJOR WORKS.	Rs.	Rs.	Rs.	
<i>Productive Works.</i>				
Desert Canal	2,57,413	*22,702	2,80,115	*Including Rs. 22,667 on account of Khelát. + Do. Rs. 17,913 do.
Begári Canal	3,62,439	+32,391	3,94,830	
Eastern Nára Works	50,744	16,594	67,338	
Total ...	6,70,596	71,687	7,42,283	
MINOR WORKS AND NAVIGATION.				
<i>Works for which Capital and Revenue Accounts are kept.</i>				
Sukkur Canal	33,619	6,815	40,434	
... ..	2,09,597	22,075	2,31,672	
... ..	2,457	541	2,998	
... ..	26,375	3,240	29,615	
... ..	1,44,412	15,424	1,59,836	
... ..	73,623	8,888	82,511	
Fuleli Canal	12,38,369	1,24,962	13,63,331	
Total ...	17,28,452	1,81,945	19,10,397	
<i>Works for which only Revenue Accounts are kept.</i>				
Under Executive Engineer, Shikárpur Canals		29,490	...	
" " Western Nára do.		37,173	...	
" " Hyderabad do.		77,420	...	
" " Fuleli do.		2,181	...	
" " Karáchi do.		21,662	...	
Total ...	...	1,67,926	...	

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Bombay, 23rd November 1892.

STATEMENT NO. I-B.

Capital Account of Irrigation Works in Sind for and to end of 1891-92.

Name of Work.	DURING YEAR.										TO END OF YEAR.									
	Direct Charges.					Indirect Charges.					Direct Charges.					Indirect Charges.				
	Works.	Establish- ment.	Tools and Plant.	Total.	Deduct Receipts on Capital Account.	Total.	Capita- lization.	Leave and Pension Allow- ances.	Total.	Grand Total.	Works.	Establish- ment.	Tools and Plant.	Total.	Deduct Receipts on Capital Account.	Total.	Capita- lization.	Leave and Pension Allow- ances.	Total.	Grand Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
MAJOR WORKS.																				
PRODUCTIVE WORKS.																				
In Operation.																				
1	Desert Canal	3,232	647	3,879	..	3,879	..	91	91	3,970	9,88,127	2,20,523	14,280	12,20,630	37	12,20,803	..	40,598	40,698	12,61,491
2	Unharwal	..	..	..	..	..	..	..	..	..	2,79,267	52,087	481	3,31,835	..	3,31,835	..	7,293	7,293	3,39,128
3	Begoti Canal	..	..	..	..	..	..	..	..	..	13,91,068	2,29,894	4,666	16,25,628	..	16,25,609	4,246	43,254	47,470	16,73,079
4	Eastern Nara Works.	67,467	16,866	842	85,175	85,175	..	2,361	2,361	87,536	41,43,131	10,28,337	44,534	52,16,002	176	52,15,826	2,669	1,88,060	1,90,729	54,06,565
	Total Major Works..	70,699	17,513	842	89,054	89,054	..	2,462	2,462	91,516	67,99,393	15,30,841	63,961	83,94,395	232	83,94,163	6,915	2,79,175	2,86,090	86,80,253
MINOR WORKS																				
AND NAVIGATION.																				
In Operation.																				
5	Sukkur Canal	..	..	..	..	..	..	..	..	..	11,10,106	2,05,471	13,330	13,28,997	160	13,28,747	19,775	40,191	59,066	13,88,713
6	Ghar Canal	..	..	..	..	..	..	..	..	..	9,35,237	75,554	1,746	4,15,537	..	4,15,537	10,329	15,111	25,440	4,40,977
7	Mohrabwah	..	..	..	..	..	..	..	..	..	52,797	13,199	22	66,018	..	66,018	..	1,851	1,851	67,869
8	Alubhar Kacheri Canal	..	..	..	..	..	..	..	..	..	19,656	3,548	23	23,207	..	23,207	..	710	710	23,917
9	Mirak Great Canal..	..	..	..	..	..	..	..	..	..	1,59,616	32,719	1,445	1,93,680	80	1,93,600	1,409	6,544	7,953	2,01,553
10	Surfrazwah	..	..	..	..	..	..	..	..	..	1,08,432	15,007	30	1,18,559	..	1,18,559	3,102	3,919	6,121	1,24,680
11	Fulei Canal..	36,102	7,151	..	43,253	43,253	..	1,001	1,001	44,254	9,17,409	1,86,989	631	11,05,049	21	11,05,028	6,401	35,649	42,050	11,47,078
	Total Minor Works and Navigation...	36,102	7,151	..	43,253	43,253	..	1,001	1,001	44,254	9,17,409	1,86,989	631	11,05,049	21	11,05,028	6,401	1,03,076	1,44,991	33,94,787
	Grand Total	1,06,801	24,664	842	1,32,307	1,32,307	..	3,453	3,453	1,35,760	77,11,802	16,16,830	64,593	93,28,632	493	93,28,139	10,316	3,82,250	4,20,181	1,20,75,040

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT
Statement showing the Financial Results of Irrigation Works for the year ending 31st March 1892.
 Realizations under main head of Working Expenses.

Name of Work.	REVENUE (Actual Receipts).										WORKING EXPENSES.										Net Revenue.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Irrigation.					Revenue (Actual Receipts).					Maintenance and Repairs.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Share of Land Revenue.		Total.			Total.		Total.			Establishment.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Rs.	Paisa.	Total.			Total.					Establishment.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			Rs.	Paisa.	Annas.	Rs.	Paisa.	Annas.	Rs.	Paisa.	Annas.	Rs.	Paisa.	Annas.	Rs.	Paisa.	Annas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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* For Revenue year 1891/92.

† Including 1 per cent. on total of the proceeds from sale of occupancy rights in lands.

FRED. HUTCHINSON,
 Examiner, Public Works Accounts.

Bombay, 23rd November 1892.

STATEMENT No. II-C.

Statement showing the Financial Results of Irrigation Works in Sind for the year 1891-92 based on actual Receipts.

Principal Results of Operations for the year ended 31st March 1892.

Irrigation Works.	1	2	3	4	5	6	7	SURPLUS REVENUE AFTER PAYING INTEREST ON DIRECT CAPITAL OUTLAY.		EXCESS CHARGES, INCLUDING INTEREST ON DIRECT CAPITAL OUTLAY.	
								Amount.	Percentage on total sum at charge.	Amount.	Percentage on total sum at charge.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
MAJOR WORKS.											
PRODUCTIVE WORKS.											
<i>In Operation.</i>											
1	Desert Canal	12,61,491	25,824	1,17,030	91,206	7.23	48,758	...	...	1,39,954	36.14
2	Unharwah	3,39,128	15,541	9,500	6,041	1.78	13,273	...	...	7,232	3.20
3	Begari Canal	18,73,079	2,61,457	90,000	1,71,437	10.25	65,024	1,06,433	32.25	...	...
4	Eastern Nara Works	54,06,555	4,35,015	1,28,034	3,06,981	5.68	2,06,930	1,00,051	1.69	...	...
	Total Major Works	86,80,253	7,37,837	3,44,564	3,93,273	4.53	3,33,935	59,288	0.86	...	...
MINOR WORKS AND NAVIGATION.											
<i>In Operation.</i>											
5	Sukkur Canal	13,88,713	1,50,350	43,541	1,06,809	7.69	53,150	53,659	2.48	...	...
6	Ghar Canal	4,40,977	6,09,841	1,57,889	4,51,952	102.49	16,621	4,85,331	*	...	...
7	Mohrabwah	67,869	24,427	13,074	16,73	2.641	8,712	88	30.51	...	...
8	Alibhar Kacheri Canal	23,917	9,002	7,966	1,056	4.25	923	88	0.21	...	...
9	Marak Great Canal	2,01,553	63,008	47,928	15,080	7.44	7,744	7,336	*	...	...
10	Surfrazwah	1,24,680	29,130	24,913	4,217	3.38	4,742	1,73,555	...	325	0.30
11	Fuleli Canal	11,47,078	4,70,667	2,83,776	2,16,891	18.91	43,336	1,73,555	97.92	...	...
	Total, Minor Works and Navigation.	33,94,787	13,56,425	5,49,107	7,318	23.78	1,29,162	6,78,156	*	...	...
	Grand Total	1,20,75,040	20,94,262	7,318	591	9.94	4,63,147	7,37,444	73.68	...	...

*The total sum at charge by Government of India letter No. 26 I. of 1892, containing the same.

Government Resolution No. 30 W. I.—275 of 1892.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Bombay, 23rd November 1892.

Demands and Receipts for the year 1891-92 in Sind.

	Balance of Demands unrealized at commencement of year.		Rabi 1891-92.		Mussam Receipts.		Total.		Total including Balance at commencement of year.	Deduct Remissions, not including Cash refunds.	Net Total.	Deduct amount unrealized at close of year.	Actual Realizations of the year.
	Kharif 1891-92.												
1	2	3	4	5	6	7	8	9	10	11			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			
MAJOR WORKS.													
<i>Productive Works.</i>													
1	Desert Canal ...	19,356	23,207	5,133	365	28,705	9,859	38,202	28,498	9,784			
2	Unharwah ...	...	...	...	23	23	...	23	...	23			
3	Begam Canal ...	4,618	19,326	6,195	925	25,746	...	30,188	15,834	14,354			
4	Eastern Nara Works ...	17	967	1,930	17,527	20,434	...	20,441	...	20,441			
	Total Major Works ...	23,991	43,500	13,258	18,140	74,898	10,035	88,854	44,302	44,552			
MINOR WORKS AND NAVIGATION.													
5	Sikkur Canal ...	705	782	424	1,748	2,954	...	3,659	547	3,112			
6	Ghar do. ...	39	2,278	407	7,779	10,464	...	10,503	284	10,219			
7	Mehrabwah ...	...	1	...	160	161	...	161	...	161			
8	Alibhar-Kacheri Canal ...	13	680	12	45	737	...	750	...	754			
9	Marak Great Canal ...	234	2,148	...	338	2,533	...	2,767	...	2,802			
10	Surfrazwah ...	648	1,540	90	175	1,805	...	2,453	330	2,123			
11	Fulehi Canal ...	4,213	21,008	2,228	6,472	29,703	...	33,916	1,602	32,314			
	Total Minor Works and Navigation ...	5,852	28,432	3,208	16,717	48,357	...	54,209	2,724	51,485			
	Grand Total ...	29,843	71,932	16,466	34,857	1,23,255	10,035	1,43,063	47,026	96,037			

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Bombay, 22nd November 1892.

STATEMENT No. IV-C.

Statement showing the Financial Results of Irrigation Works in Sind for the year ended 1891-92 based on the Assessment of the year.
Principal Results and Operations for the year ended 31st March 1892.

Irrigation Works.	Capital Outlay (Direct and Indirect) to end of year.	* REVENUE ASSESSED DURING THE YEAR.										Working Expenses, Direct and Indirect.	Not assessed Revenue of this year.	Percentage on Capital Outlay to end of year.
		Direct assessed Revenue.							Indirect Revenue— (Land Reve- nue due to operation of Canal).†	Grand Total.				
		Total.												
		Occupier's rate.	Owner's rate.	Plan- tation.	Water- power.	Naviga- tion.	Miscel- laneous.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
MAJOR WORKS.														
Productive Works.														
1														
2														
3														
4														

*The assessments by the Civil Department are for Revenue year.

ent. on 3/10ths of the proceeds from sale of occupancy rights in lands to end of 1891-92.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Bombay, 23rd November 1892.

STATEMENT.



General Abstract of Financial Results of Irrigation

		WORKS IN									
		MAJOR WORKS—PRODUCTIVE WORKS.					MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL				
		Desert Canal.	Unharwāh.	Begari Canal.	Eastern Nāra Works.	Total.	Sukkur Canal.	Ghār Canal.	Mehrabesh.	Alibhar Kacheri Canal.	Mārk Great Canal.
Capital Outlay.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
During year	Direct	3,819	.....	.....	85,175	89,054	.....	.....	.....	.....	.....
	Indirect	91	.....	.....	2,361	2,452	.....	.....	.....	.....	.....
	Total	3,970	.....	.....	87,536	91,506	.....	.....	.....	.....	.....
To end of year	Direct	12,20,693	3,21,835	16,25,609	52,15,826	83,94,163	15,28,747	4,15,537	66,013	23,207	1,53,600
	Indirect	40,598	7,293	47,470	1,90,729	2,86,090	59,966	25,440	1,851	710	7,953
	Total	12,61,491	3,39,128	16,73,079	54,06,555	86,80,253	15,88,713	4,40,977	67,869	23,917	2,01,553
Gross Revenue.											
During year	Direct	9,734	23	14,354	20,441	44,552	3,112	10,219	161	754	2,892
	Indirect	16,090	15,518	2,47,103	4,14,574	6,93,285	1,47,238	5,99,622	24,266	8,248	60,206
	Total	25,824	15,541	2,61,457	4,35,015	7,37,837	1,50,350	6,09,841	24,427	9,002	63,098
To end of year	Direct	3,27,861	193	3,78,531	6,19,750	13,26,435	25,056	*2,21,127	1,530	.....	.....
	Indirect	17,76,456	3,06,367	44,97,542	60,32,493	1,26,12,733	13,78,374	1,31,53,163	2,03,752	.....	.....
	Total	21,04,417	3,06,560	5,76,073	66,52,218	1,39,39,168	14,00,430	1,33,80,290	2,05,152	.....	.....
Working Expenses.											
During year	Direct	1,13,036	9,243	67,695	1,25,380	3,35,354	43,641	1,54,709	12,509	7,303	46,894
	Indirect	3,994	257	2,305	2,664	9,210	900	3,150	263	177	1,034
	Total	1,17,030	9,500	69,000	1,28,034	3,44,564	43,541	1,57,859	13,074	7,480	47,928
To end of year	Direct	6,03,484	1,06,294	21,54,197	28,47,155	58,01,130	9,54,365	37,99,403	1,29,861	1,28,748	13,85,638
	Indirect	30,182	2,365	57,181	1,19,629	1,99,297	26,071	87,148	2,811	3,570	9,642
	Total	7,13,666	1,08,659	22,11,318	29,66,784	60,00,427	9,80,436	38,86,551	1,32,672	1,32,316	3,95,280
Net Revenue.											
During year		-51,206	6,041	1,71,457	3,06,931	8,33,373	1,06,809	4,51,952	11,353	1,016	15,080
		13,90,751	1,97,801	26,64,755	36,85,434	79,38,741	4,13,304	94,03,739	72,450	234	5,92,213
		13,39,545	2,03,842	28,36,212	39,92,365	87,72,114	4,23,943	94,55,691	83,803	1,236	6,07,293
Simple Interest.											
During year		48,753	13,273	65,024	2,06,930	3,33,980	.....	.....	.....	.....	.....
		6,58,515	91,571	12,15,341	40,97,652	60,80,979	.....	.....	.....	.....	.....
		7,07,268	1,04,844	12,80,365	43,04,582	64,14,959	.....	.....	.....	.....	.....
Net profit after paying off Interest.											
During year		-13,594	-7,232	1,06,433	1,00,051	59,288	.....	.....	.....	.....	.....
		7,34,236	1,06,230	14,49,514	-4,12,218	18,77,762	.....	.....	.....	.....	.....
		7,20,642	99,000	15,55,947	-3,12,167	18,38,474	.....	.....	.....	.....	.....

* Excess credit of
+ Excess debit of

Note.—Refunds of revenue are deducted from direct gross revenue and not added to the

Bombay, 23rd November 1892.

Works in Sind for and up to the close of 1891-92.

OPERATION.

AND REVENUE ACCOUNTS ARE KEPT.			MINOR WORKS AND NAVIGATION—WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.							Expenditure on, and Receipts from, Agricultural Works, for which neither Capital nor Revenue Accounts are kept.	
Surfraz-wali.	Fuleli Canal.	Total.	Grand Total.	Under Executive Engineer, Shikarpur Canals.	Under Executive Engineer, Western Nara Canals.	Under Executive Engineer, Hyderabad Canals.	Under Executive Engineer, Fuleli Canals.	Under Executive Engineer, Karachi Canals.	Total.		
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Expenditure.	Receipts.
...	48,253	48,253	1,32,307	...	...	...	...	...	...	BROACH CANALS.	
...	1,001	1,001	2,453	...	...	...	...	...	...	Kashmir Bund.	
...	44,254	44,254	1,35,760	...	...	...	...	...	...	Maintenance and repairs to Bund	20,379
1,15,559	11,05,028	32,50,596	1,16,44,859	...	...	...	...	...	...	Rent of Telegraph line at Bading	1,800
6,121	42,060	1,44,091	4,30,181	...	...	...	...	...	...	Constructing a new loop	308
1,34,680	11,47,078	33,04,787	1,20,75,040	...	...	...	...	...	...	General charges for Establishment	5,752
...	...	...	...	...	...	...	...	...	...	General charges for Tools and Plant	184
...	...	...	...	...	...	...	...	...	...	Share of collection charges in the Civil Department	690
...	...	...	...	...	...	...	...	...	...	Direct Receipts	322
...	...	...	...	...	...	...	...	...	...	Irrigation share of Land Revenue	6,127
...	...	...	...	...	...	...	...	...	...	Total, Begari Canals	29,013
...	...	...	...	...	...	...	...	...	...	...	6,449
...	...	...	...	...	...	...	...	...	...	SHIKARPUR CANALS.	
2,123	32,314	51,485	96,037	8,538	22,950	17,070	899	9,603	59,360	Sukkur-Begari Bund—Improvements and maintenance and repairs	73,056
27,007	4,38,353	13,04,930	19,98,325	3,87,683	6,69,038	5,79,965	48,870	4,28,651	21,14,207	Kashipur Bund—Maintenance and repairs	1,715
...	...	...	...	...	...	...	...	...	...	General charges for Establishment	18,667
...	...	...	...	...	...	...	...	...	...	General charges for Tools and Plant	84
...	...	...	...	...	...	...	...	...	...	Direct Receipts	424
...	...	...	...	...	...	...	...	...	...	Total, Shikarpur Canals	65,522
...	...	...	...	...	...	...	...	...	...	...	424
...	...	...	...	...	...	...	...	...	...	GHAR CANALS.	
...	...	...	...	...	...	...	...	...	...	Ghar Bund—Improvements and maintenance and repairs	13,524
...	...	...	...	...	...	...	...	...	...	General charges, Establishment	3,200
...	...	...	...	...	...	...	...	...	...	General charges, Tools and Plant	63
...	...	...	...	...	...	...	...	...	...	Direct Receipts	123
...	...	...	...	...	...	...	...	...	...	Total, Ghar Canals	16,787
...	...	...	...	...	...	...	...	...	...	...	123
...	...	...	...	...	...	...	...	...	...	WESTERN NARA CANALS.	
...	...	...	...	...	...	...	...	...	...	Nara Bund—Maintenance and repairs	8,557
...	...	...	...	...	...	...	...	...	...	General charges—Establishment	2,907
...	...	...	...	...	...	...	...	...	...	General charges—Tools and Plant	60
...	...	...	...	...	...	...	...	...	...	Direct Receipts	33
...	...	...	...	...	...	...	...	...	...	Total, Western Nara Canals	10,564
...	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	EASTERN NARA,	
...	...	...	...	...	...	...	...	...	...	Direct Receipts	3
...	...	...	...	...	...	...	...	...	...	KARACHI CANALS.	
...	...	...	...	...	...	...	...	...	...	Mathematical Instrument Depot in Sind and Tools and Plant charges of the Superintending Engineer Establishment	720
...	...	...	...	...	...	...	...	...	...	Mathematical Instrument Depot in Sind and Tools and Plant charges of the Superintending Engineer—Tools and Plant	590
...	...	...	...	...	...	...	...	...	...	Direct Receipts	6
...	...	...	...	...	...	...	...	...	...	Total Karachi Canals	1,300
...	...	...	...	...	...	...	...	...	...	...	6
...	...	...	...	...	...	...	...	...	...	HYDERABAD CANALS.	
...	...	...	...	...	...	...	...	...	...	Establishment	8,163
...	...	...	...	...	...	...	...	...	...	FULELI CANALS.	
...	...	...	...	...	...	...	...	...	...	Direct Receipts	1
...	...	...	...	...	...	...	...	...	...	Grand Total	1,54,348
...	...	...	...	...	...	...	...	...	...	...	7,039

Rs. 13 adjusted.
Rs. 80 do.
direct working expenses, vide Government Resolution No 1697, dated 2nd October 1889.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. I-E.

Statement of Areas irrigated by Irrigation Works in Sind during the year 1891-92.

Name of Canal.	AREA IRRIGATED IN ACRES.							AVERAGE DISCHARGE PER CUBIC FOOT PER SECOND.				ACRES IRRIGATED PER CUBIC FOOT PER SECOND.			
	Kharrif.	Rabi.	Total.	Flow.	Lift.	Double-cropped.		At Head.		Utilized.		Discharge at Head.		Utilized.	
						Area irrigated.	Percentage of total area.	Kharrif.	Rabi.	Kharrif.	Rabi.	Kharrif.	Rabi.	Kharrif.	Rabi.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAJOR WORKS.															
Begari Canals...	Desert Canal ...	45,539	11,571	60,110	52,789	7,321	3,484	7.79	1,217	...	...	40.41	...	...	...
	Unharwah ...	13,997	5,286	19,283	16,942	2,341	182	0.94	584	...	...	33.02	...	...	...
	Begari Canal ...	130,527	44,192	174,719	154,565	20,151	14,020	0.06	3,214	...	...	54.56	...	...	...
Eastern Nara ...	Mithrao Canal ...	88,283	...	88,283	65,109	23,174	1,688	0.02	2,800	...	...	31.33	...	...	...
	Thar Canal ...	29,541	...	29,541	26,710	2,830	2,057	0.10	1,139	...	...	25.93	...	...	...
MINOR WORKS															
Capital and Revenue Accounts.															
Ghar Canal ...	Sukkur Canal ...	54,518	...	54,518	47,342	7,176	20,317	0.37	1,682	...	...	32.41	...	...	...
	Ghar Canal ...	180,950	58,419	239,369	237,564	1,805	81,659	0.33	6,677	...	...	35.66	...	...	...
Hyderabad Canals ...	Mehrabwah ...	11,833	1,484	13,317	1,633	11,732	...	...	208	...	...	64.26	...	...	...
	Alibhar Kachori ...	10,093	129	10,222	60	10,162	...	...	250	...	...	43.29	...	...	...
	Marak ...	53,179	582	54,111	2,270	61,841	...	...	1,332	...	...	40.62	...	...	...
	Surfrax ...	25,660	1,440	27,124	1,928	25,196	...	...	465	...	...	58.33	...	...	...
Fuleli Canals ...	Fuleli ...	277,123	47,607	324,730	215,953	108,782	...	...	7,276	...	...	44.56	...	...	...

Note.—(a) Ghar ... 2,37,564

3,917

2,41,481

Deduct—

Dubari... 2,112

2,39,369

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

STATEMENT II-E.

Statement showing Incidence of Working Expenses and Assessed Revenue on Canals in Sind during the year 1891-92.

Canals.	Average discharge of the year at Canal-head in cubic feet per second.	WATER-RATE ASSESSED, 1891-92.					Gross assessed Revenue from all sources.	Working expenses, direct and indirect.	Acres irrigated during the year 1891-92.	WORKING EXPENSES.						
		Occupiers.	Owner's.	Total Direct.	Indirect.	Total of Direct and Indirect.				Per cent. on Gross Revenue.	Per Acre irrigated.	Per cubic foot per second of the discharge at Canal-head.	Per Acre irrigated.	Per cubic foot per second of discharge at Canal Head.	Per Acre irrigated.	Per cubic foot per second of discharge at Canal-head.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MAJOR WORKS.																
Regari Canal District...	Desert Canal ...	1,217	...	25,340	18,133	43,473	46,863	1,17,030	31,772	249.73	3.68	96.16	0.37	14.92	...	...
	Unharwah ...	584	...	...	16,341	16,341	16,341	9,500	15,323	16.33	0.19	19.27	0.97	28.64	...	...
	Regari Canal ...	3,214	...	25,381	2,54,011	2,77,532	2,77,757	90,000	146,826	32.40	0.83	26.00	1.72	78.41	...	...
Eastern Nara District	Mithrao Canal ...	2,800	...	...	2,83,212	2,83,212	2,84,842	65,052	110,000	25.53	0.55	...	2.13	90.43	...	...
	Thar Canal ...	1,139	...	1,182	76,251	76,433	76,546	18,378	34,351	24.56	0.54	...	2.10	66.07	...	...
Total, Major Works		5,954	...	55,043	6,16,473	6,70,516	6,73,172	3,00,400	351,397	44.38	0.80	38.94	1.75	68.74	...	...
MINOR WORKS.																
Capital and Revenue Accounts are kept																
Ghar Canal District...	Sukkur Canal ...	1,682	...	1,906	1,46,431	1,47,637	1,40,383	43,541	87,103	29.15	0.50	23.30	1.68	57.06	...	...
	Ghar Canal ...	6,677	...	2,685	5,94,423	5,97,113	6,04,892	1,57,899	232,277	39.10	0.68	23.65	2.35	89.03	...	...
Hyderabad Canals Dis- trict	Mehrabwah ...	208	...	1	24,537	24,538	24,698	15,074	15,308	53.04	0.99	62.23	1.96	117.97	...	...
	Alibhar Kacheri ...	250	...	602	8,216	8,040	8,953	7,966	9,250	81.38	0.30	31.94	0.98	32.99	...	...
	Marak ...	1,332	...	2,105	60,306	62,401	62,739	47,928	47,054	70.29	1.02	33.93	1.38	45.70	...	...
	Surfrax ...	465	...	1,630	27,007	28,637	28,912	24,913	22,141	86.47	1.12	53.58	1.22	58.05	...	...
Fuleli Canals District.	Fuleli ...	7,276	...	23,231	4,38,488	4,61,719	4,68,181	2,53,276	269,998	125.03	0.94	34.88	1.62	60.26	...	...
Total, Minor Works		17,890	...	31,640	12,90,345	13,20,983	13,47,702	5,49,107	680,969	40.74	0.81	30.69	1.91	72.63	...	...
Grand Total		26,844	...	86,683	19,14,818	20,04,501	20,20,874	8,49,507	1,032,366	42.07	0.82	38.29	1.63	70.37	...	...

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Statement of Quantity and Value of Crops on Bakkur and ... in Sind during the year 1891-92.

Description.	UPPER SIND FRONTIER.			SHIKARPUR.			THAR AND PAKAR.			HYDRABAD.			KARACHI.			TOTAL FOR PROVINCE.			Value per acre.
	Area irrigated.	Estimated value.		Area irrigated.	Estimated value.		Area irrigated.	Estimated value.		Area irrigated.	Estimated value.		Area irrigated.	Estimated value.		Area irrigated.	Estimated value.		
1	2	3		4	5		6	7		8	9		10	11		12	13		14
	Acrea.	Rs.		Acrea.	Rs.		Acrea.	Rs.		Acrea.	Rs.		Acrea.	Rs.		Acrea.	Rs.		Rs.
Rice ...	10,070	1,82,694		241,592	60,92,648		80,957	15,02,894		100,000	22,54,001		160,551	23,90,175		653,200	1,24,22,342		19
Jowari...	88,200	11,10,666		150,620	30,81,227		684	47,527		104,942	19,54,118		43,022	7,20,562		396,408	69,14,410		17
Bajri ...	14,780	74,655		7,731	1,08,324		28,853	5,63,508		275,140	43,15,420		25,533	3,50,029		352,046	54,41,936		15
Cotton...	968	18,492		2,492	39,023		21,666	5,40,375		68,609	13,18,771		89	1,788		93,924	19,18,449		20
Other crops ...	43,767	7,43,565		25,181	4,37,462		5,843	1,44,193		73,084	15,87,808		7,464	93,389		155,339	30,06,412		19
Total	187,785	21,80,002		436,616	97,58,094		138,006	27,98,497		681,874	1,14,30,413		256,639	35,55,943		1,650,937	2,36,73,549		18
Wheat ...	29,810	5,27,759		160,864	35,15,812		32,791	5,71,710		38,149	8,13,425		35,682	6,56,153		287,196	60,84,869		21
Barley ...	534	6,380		1,749	29,270		581	4,493		4,641	37,259		10,492	89,896		17,967	1,67,218		9
Oil-seeds ...	46,431	8,02,834		28,333	6,94,807		16,792	1,64,079		28,258	3,13,391		7,707	1,20,347		127,431	20,95,058		16
Other crops ...	13,967	1,50,406		10,110	13,27,218		6,714	85,733		15,623	4,51,475		10,744	2,28,149		56,558	22,92,981		41
Total	90,442	14,87,379		191,056	55,67,107		56,738	8,25,955		86,671	16,16,130		64,925	11,44,445		489,152	1,06,41,016		22
Total under both heads	247,927	36,17,381		627,672	1,53,25,801		194,761	36,24,452		768,545	1,30,46,543		301,184	47,00,388		2,140,089	4,68,14,565		19

Note.—It is not possible to give this information for each canal this year.

H. M. THOMPSON, M. Inst. C.E.,
Superintending Engineer in Sind.

BUKKUR GAUGE.

Series of readings for the year 1891.
Series of Mean readings for 10 years ending 1891.
Series of Mean readings for 4 years ending 1890.

KOTRI GAUGE.

Series of readings for the year 1891.
Series of Mean readings for 10 years ending 1891.
Series of Mean readings for 4 years ending 1890.

Days.	JUNE.				JULY.				AUGUST.				SEPTEMBER.				Remarks.
	Fe. in.	ft. in.	ft. in.	ft. in.	Fe. in.	ft. in.	ft. in.	ft. in.	Fe. in.	ft. in.	ft. in.	ft. in.	Fe. in.	ft. in.	ft. in.	ft. in.	
1	9 0	8 8	8 8	0 3	11 7	11 0	13 9	14 5	13 11	12 4	12 9	12 10	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
2	8 11	8 10	9 1	10 1	11 3	11 3	13 11	14 5	13 21	12 7	12 8	12 9	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
3	8 11	9 0	9 3	10 1	11 11	11 6	14 0	14 5	13 14	12 7	12 8	12 9	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
4	9 1	9 3	9 6	11 1	12 2	11 9	14 3	14 5	13 24	12 0	11 7	12 2	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
5	9 2	9 3	9 10	11 6	12 4	12 0	14 2	14 1	13 6	12 0	11 6	12 0	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
6	9 3	9 10	10 0	11 9	12 5	11 8	14 0	14 1	13 5	11 4	11 6	12 0	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
7	9 7	10 0	10 2	12 0	12 6	12 6	13 10	14 0	12 5	10 1	11 1	11 6	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
8	9 10	10 1	10 2	11 9	12 11	12 8	14 1	14 2	13 6	11 3	11 1	11 5	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
9	10 2	10 2	10 3	11 5	13 1	12 9	14 4	14 3	12 4	9 5	11 3	11 0	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
10	10 8	10 4	10 4	11 5	13 3	12 10	14 4	14 3	12 4	9 5	11 3	11 0	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
11	11 2	10 4	10 4	11 3	13 6	13 0	14 5	14 4	12 4	8 11	10 10	10 8	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
12	11 6	10 4	10 5	11 2	13 8	12 5	14 5	14 5	12 4	8 11	10 10	10 8	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
13	11 10	10 4	10 3	11 2	13 9	12 3	14 7	14 7	12 4	7 8	9 10	10 6	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
14	11 8	10 5	10 3	11 0	13 8	12 5	14 8	14 1	12 9	7 4	9 9	10 4	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
15	11 10	10 6	10 3	10 8	13 8	12 3	14 9	14 10	12 10	8 9	9 10	10 3	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
16	11 9	10 9	10 1	10 10	13 8	12 3	14 9	14 10	12 0	8 9	9 7	9 1	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
17	11 9	10 9	10 1	10 10	13 8	12 3	14 9	14 10	12 0	8 9	9 7	9 1	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
18	11 6	10 11	10 1	11 3	13 11	12 3	14 3	14 5	12 8	8 4	9 5	10 6	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
19	11 6	11 1	10 8	11 9	14 0	13 7	13 10	14 4	12 7	8 3	9 4	8 8	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
20	11 0	11 1	10 2	12 3	14 2	13 6	12 10	14 4	12 7	8 3	9 3	8 6	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
21	10 5	11 2	10 3	12 0	14 2	13 5	13 11	13 11	12 8	8 5	9 3	8 4	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
22	10 6	11 3	10 3	13 0	14 3	12 5	14 3	14 3	12 6	8 5	9 3	8 1	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
23	10 1	11 2	10 3	13 1	14 2	12 5	14 3	14 3	12 5	7 10	8 8	7 11	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
24	9 7	11 1	10 2	12 10	14 2	12 5	14 3	14 4	12 6	9 1	8 3	7 9	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
25	8 3	11 1	10 1	12 8	14 1	11 7	13 11	12 8	12 6	9 2	7 11	7 7	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
26	8 11	11 2	10 3	12 3	14 0	12 3	13 5	13 9	12 6	9 3	7 9	6 6	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
27	8 10	11 3	10 5	12 4	14 0	12 3	13 8	13 8	12 6	9 5	7 8	7 7	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
28	8 6	11 3	10 7	12 6	14 1	12 10	12 3	13 7	12 5	9 7	7 6	7 6	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	
29	8 10	11 4	10 9	12 9	14 2	12 11	11 8	13 6	12 4	9 5	7 5	7 0	Readings 1891.	Readings 1891.	Readings 1891.	Readings 1891.	
30	9 1	11 5	10 10	13 2	14 3	13 10	11 8	13 4	12 10	9 2	7 3	7 3	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	6 years M. ending 1890.	
31	...	...	...	...	...	...	...	...	...	...	...	...	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	10 years M. ending 1891	

H. M. THOMPSON, M. Inst. C. E.,
 Superintending Engineer in Sindh.

List of Highest Readings of Kotri Gauges from 1882 to 1891.

BUKKER GAGE.

1891.		1890.		1889.		1888.		1887.		1886.		1885.		1884.		1883.		1882.	
Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.	Date and Month.	Inches.
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
1891.	14	1890.	16	1889.	16	1888.	14	1887.	16	1886.	10	1885.	15	1884.	15	1883.	11	1882.	17
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H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Statement showing the number of days on which Bukkur and Kotri Gauges read above 13 and 17 feet respectively.

BUKKUR.					KOTRI.					
Year.	Dates on which the gauge reads above 13 feet continuously.	Total number of days.	Dates on which the gauge reads below 13 feet, viz., broken after once rising to and above 13 feet.	Total number of days.	Year.	Dates on which the gauge reads above 17 feet continuously.	Total number of days.	Dates on which the gauge reads below 17 feet, viz., broken after once rising to and above 17 feet.	Total number of days.	Remarks.
1889	... From 22nd June to 5th September, both days inclusive.	76	Nil.	Nil.	1889	... From 5th July to 8th September, both days inclusive.	66	Nil.	Nil.	
1890	... From 11th to 15th July=5 days, and from 30th July to 30th August=32 days.	37	16th to 29th July...	14	1890	... From 17th to 19th July=3 days, and from 2nd August to 4th September=34 days.	37	From 20th July to 1st August.	13	
1891	... From 22nd to 23rd July=2 days, and from 30th July to 26th August=28 days.	30	24th to 29th July...	6	1891	... From 25th July to 7th September.	45	Nil.	Nil.	Year under report.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

No. 24 of 1893.

To

THE SECRETARY TO GOVERNMENT,
Public Works Department,
Bombay.

PUBLIC WORKS DEPARTMENT:

*Office of the Superintending Engineer in Sind,
Camp Khupra, 4th January 1893.*

SIR,

I have the honour to forward the Irrigation Revenue Report for this Division for the year 1891-92 with the usual accompaniments.

2. I have endeavoured to meet the wishes of the Government of India regarding the separation of statistics of revenue and expenditure under the financial heads of accounts in the body of the report and in the tables annexed to it. I have also added Statements I—III E asked for in paragraph 24 of Government of India Resolution No. 197 of 1892, prepared as completely as they could be from the information available, but I have been unable to complete I—A in time for this report. I have omitted Table VIII as it is superseded by E—II.

3. I am afraid the wishes of the Government of India have not been fully complied with in this report, but they have been attended to as far as was possible, and I hope to be able to do more to meet them in my next.

4. I have made some alterations in the form and number of statements given in the body of the report, with the intention of making it more clear, omitting anything which was given before.

I much regret the delay in submission of this year's report, but it was unavoidable and due to the extra work entailed by the alterations and additions in various statements and tables and to the general work of the Division, has been very heavy and leaves little time for the consideration of any outside it.

I have the honour to be,

Sir,

Your most obedient Servant,

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer in Sind.

Through the Commissioner in Sind.

No. 284 of 1893.

PUBLIC WORKS DEPARTMENT:

*Commissioner's Office,
Camp Dostali, 24th January 1893.*

Submitted to Government.

The net consolidated revenue from canals in 1891-92, viz. Rs. 50,02,708, shows an insignificant decrease of Rs. 28,203 on the revenue of 1890-91, and there is a corresponding decrease of 5,400 acres in the area cultivated.

2. The inundation was on the whole poor, low, short and fluctuating, and worse in the northern districts than the inundation of 1890-91. The kharif revenue shows a falling off from last year in every district but the Western Nara and Karachi Canals Divisions, and in these the increase is not large. It is due therefore to the rabi crops, that the total revenue has remained at the high figure above mentioned. The large rabi area was remarked on last year, but

the Sind Canals deserve the more credit this year, from the fact that only one slight flood occurred north of Kotri, and all the rest of the rabi crops depended on canal water for their irrigation. Government are aware how seriously a fluctuating inundation interferes with the good working of canals, especially of low gradient canals, such as those in the Hyderabad District, by the deposit of silt at each successive fall. It is particularly gratifying therefore that, with one exception, the complaints of want of water were very few, and the attention given to the clearance of the Fuleli and Hyderabad Canals may be considered to have been well repaid. The exception alluded to is the Desert Canal. The following figures show the area of cultivation and the revenue:—

	Acres.
Average area cultivated in last three years	... 77,873
	Rs.
Average revenue...	... 1,39,784
	Acres.
Area cultivated in 1891-92	... 31,777
	Rs.
Net Revenue in 1891-92	... 17,203

The Dhand, from which the supply of the canal is drawn, was completely silted up by the sudden erosion of a sand bank, from which the sand was carried down and deposited at its mouth. The cultivation, reduced to less than half the average by the action of the river, was afterwards repeatedly destroyed by swarms of locusts until the distracted cultivators emigrated in large bodies. Remissions sanctioned at one time on account of cultivation destroyed in two talukas of the Upper Sind Frontier District, dependent on this canal and the next, amounted to almost one lakh of rupees. It is necessary to mention this as the figures will not be found in the column of remissions in Statement No. III—C, though Mr. Thompson gives them in Statement D in the report. The crops on the Unharwáh suffered in like manner, receiving a revenue of only Rs. 15,578, against an average of Rs. 58,855, and the canal too, the cultivation was less than the average last year. But with two exceptions it will be observed that the area of cultivation under all the canals in Sind is generally above the average, a result which the Commission regards as very encouraging in a year when the inundation was poor and untimely. For it means that water is being economised, and made to go further than it used. From another point of view, however, it is not so satisfactory. A great deal of land does not receive a sufficient supply, and the extension of cultivation has had perforce to be peremptorily stopped over extensive areas in all parts of Sind, nor will the growing population have an opportunity of bringing larger areas under cultivation until new projects are sanctioned.

3. The principal defaulter in the kharif season, as above noticed, was the Desert Canal, and it is chiefly due to this one canal that the kharif area is 83,000 acres less than last year. The excess of 78,000 acres of rabi crops over last year's figures comes from the Begári, Shikárpur and Western Nára Canals Districts. The late rise of the river was in their favour. The total rabi revenue exceeds last year's by 2½ lakhs, and the average by more than 4½ lakhs.

4. The following statement seems scarcely borne out by facts:—

"It is a very satisfactory feature in the returns for the year under report, that the figures of assessment compare more favourably with those of past years, than do those of cultivation. It is satisfactory for this reason that it suggests a general improvement in the character of the cultivation and the growth of more valuable crops, which, under the settlement now almost universally in force in Sind, pay higher rates."

Taking the totals of area and revenue in Statements A. and B.* for Government land only, it will be found that the average assessment per acre in 1890-91 was 2-57, but in 1891-92 it was 2-56, that is, slightly lower in the latter year, though these however are both better than the average of the past five years,

* In Statement A in last year's report, the Irrigation share of net consolidated assessment was given. This year the consolidated assessment itself on Government lands has been given in Table B. No doubt this is due to the contingent elaboration which the forms undergo, but constant changes make comparison troublesome. Statement D again, which last year gave details of Jágírh and foreign cultivation, this year is devoted to remissions.

namely 2'49. It would seem, therefore, taking this rough guidance, that the class of cultivation has on the whole improved during the past five years; but it must be remembered that the revenue of all "dubari" cultivation is included in the consolidated revenue, whereas the area on which the second crop is raised, is not included in the area. It therefore follows that the average assessment may be affected, though very slightly, by variations in dubari cultivation. With regard to the comparison of this and last year's income, it has already been remarked that the increase of revenue is due entirely to the rabi crops. The particular crop which was grown so largely was wheat, *vide* paragraph 17 below; but the assessment on the wheat crop, though considered the more valuable crop, is at present the same as on oil-seeds grown by the same method of irrigation, and the larger area sown with wheat was probably due to its high price. The statement in paragraph 14 of the report, that "the assessment varies with the crops," may possibly mislead. The assessment varies with the irrigation employed, rice being the only crop exceptionally treated, mainly on account of the great share of water it requires. Crop rates exist in one or two minor and special localities, but they are the exceptions that prove the rule, and are being gradually extinguished. The satisfactory feature from a general view of this year's report is, in the Commissioner's opinion, this,—that the canals generally all over Sind were able to distribute advantageously the late inundation under trying circumstances, a fact that testifies to the judicious manner in which the Superintending Engineer carried out the clearance and maintenance of the canals, aided by a zealous and capable staff.

5. The returns A—1 and B—1, which show the area of cultivation and revenue from Jāghirs in British Territory, are favourable. The total assessment was Rs. 66,813, and both area and revenue were the largest in the past five years, *excepting* the year 1890-91. It will be observed here, too, that the ratio of *area* to *revenue* this year is better than the similar ratio $\frac{1}{266}$ of the average of the past five years.

The cultivation in Khelāt was *greatly* reduced by the failure of the Desert Canal, the kharif revenue being Rs. 29,854, *below* the average. The rabi, owing to the successful working of the Begāri, was not much below the average. The figures of remissions and outstandings for Khelāt are misleading. The *figures* are for last year, though only sanctioned in this year, and the outstandings appear to include the third instalment, which was not due. It is certain, however, that the large increase of Rs. 20,000 under the head of outstandings cannot be wholly explained on these grounds, and the failure of the Desert Canal must have been seriously felt across the border, where, at the most, only the tail water is available. Suffice it that the realisations from Khelāt were Rs. 59,000 below the average, and Rs. 32,000 less than last year (*vide* Statement C—3). This is much to be regretted, for although from the purely revenue point of view, water pays better in Sind than it does in Khelāt, still the deprivation of water is much felt by the Beluch tribes, and is merely looking to the peace and quietness of the border, very undesirable.

6. The revenue of the year has already been generally commented on. From Statement C it is satisfactory to note that the outstandings have been very largely reduced in the Shikārpur District. The increase of outstanding in the Upper Sind Frontier District is due to the failure of the Desert Canal and to the plague of locusts, and in this district the collections are Rs. 1,27,067 less than last year. Shikārpur and Karāchi show an increase of Rs. 98,328 and Rs. 32,615, respectively, of canal revenue for collection. The hakāba for collection on Jāghirs in British territory, is not affected by the Desert Canal and is Rs. 7,476 in excess of the average, and is the largest sum recorded during the five years, excepting 1889-90. The Commissioner was not aware that even the comparatively small sum of Rs. 10,597 could be outstanding on account of hakāba payable by Sind Jāghirs, and on enquiry he finds that the so-called outstanding probably represents the sum not yet due and collected after the Canal Return No. IX was sent to the Superintending Engineer. According to the jamābandi returns, the balance of Jāghir hakāba on 1st August was Rs. 2,264-4-0, all of it, with the exception of two small items, aggregating Rs. 17-8-0, due from the Shikārpur District. Of this, Rs. 1,415 were realised in

due time, but not accounted for till after the close of the year (when the revenues of the villages are shared between Government and certain Pátidár's), and a sum of Rs. 631-8-0 is under dispute, and will probably have to be written off as having been imposed on lands cultivated on rainfall. The true balance of Jágírh hakaba, therefore, only amounted to Rs. 217-12-0.

7. The revenue derived from the sale of occupancies has, according to this report, advanced during the three years, for which it has been separately noted. The 4 per cent. on the irrigation share of this amounted (*vide* Statement C 3) to Rs. 20,622. Government, in paragraph 21 of their Resolution No. 98 W. I.—1016 of 1892 (last year), point out that the credit is a cumulative one and Mr. Thompson's statement at the end of paragraph 19, that 52,913 acres were sold, yielding Rs. 20,622, seems, therefore, wrong. The latter figure represents Rs. 15,066,—the indirect gain from this source up to the end of last year, plus Rs. 5,569, the gain for 1891-92. The Commissioner would respectfully suggest whether the recording of such a very indirect gain as the assumed *interest* on proceeds of ordinary sales of land, the actual proceeds not having been invested by Government, *in addition to* crediting the canals directly with $\frac{1}{2}\%$ ths of the actual sums realised, does not tend to invest the statistics with an air of unreality, as well as to lead to confusion, or at least to mistaken ideas of the financial results of the canals on the part of the uninitiated. In years to come this fictitious credit may grow to an exaggerated amount. According to Table VII B, the total irrigation share ($\frac{1}{2}\%$ ths) credited to the canals comes to Rs. 1,39,247, which would make the gross receipts (Land and Irrigation) from this source

	Rs.
*Karachi	38,356
Hyderabad	70,030
Shikárpur	1,63,316
Thar and Párkár ...	1,077
Upper Sind Frontier ...	3,412
Total	2,76,191

Rs. 1,54,718. The Commissioner's own jamá-bandi figures give Rs. 2,76,191* as sale-proceeds of lands, and this figure includes, but little unirrigable land, so that apparently there is some error in the figures. It may be noted that from the beginning of last year onwards the proceeds were secured (in Rohri especially, where after all much of the land could not be cultivated, owing to the action of the floods); but the Commissioner in December 1891 took steps towards carrying out the wishes of Government (referred to in Government Resolution No. 136 W.I.—1566 of 4th October 1892) and putting a stop to this system, which, seeing that Government is the owner of the land, amounted either to pure rack-renting or, at any rate, to greatly nullifying the boon of a moderate and fair assessment. The receipts for occupancy fees (whatever they amounted to) are not, therefore, likely again to be very high.

8. The Superintending Engineer gives in paragraph 15 a table showing the revenue specially imposed on unauthorised cultivation, amounting to Rs. 43,593, of which he claims (though he has not entered it in the tables appended to the report) Rs. 39,233 as canal revenue. The Commissioner regrets that the amount should be so considerable, and after making full enquiries on the subject, has issued instructions, which, he hopes, will tend to enable cultivators to obtain land that they require, without delay, and so reduce the number of fines that are now imposed on those who cultivate without asking leave.

9. Remissions (which aggregated Rs. 1,43,964, or nearly $\frac{1}{4}$ th of a lách over the average) reached the high figure of Rs. 1,06,401 in the Upper Sind Frontier District alone, but these were mostly given on account of repeated damage by locusts to the already diminished cultivation. The remissions in all other districts were small and below the average, except in the Shikárpur Canals Division, where, though they only amounted to Rs. 2,060, the average is only Rs. 338, and in the Karáchi Canals Division. The six years' average in this division had been greatly raised by the heavy remissions in 1889-90 and 1890-91, and stands at Rs. 27,095. It is much to be regretted, therefore, that the sum of Rs. 23,306 was remitted owing to breaches in the river embankments and the spill of the Baghiar, which flooded a great deal of cultivation. The inundation which, Mr. Thompson says, was more favourable in this district than in any other, was thus greatly reduced in its usefulness, and had it not been for the more than usual expenditure on bunds and loops, the damage would have been more widespread.

The Commissioner expects that the figures of the current year will prove still worse in Lower Sind. Government have sanctioned (Government Resolution No. 1 W. I—5, dated the 3rd January 1893) a scheme costing Rs. 36,847 for the Baghiar embankments, but other works will be necessary, as the state of a great part of the country, since the rise in the level of the river at Kotri, is deplorable.

10. The expenditure on maintenance (works) has been larger than in any of the three previous years, and amounted to Rs. 9,88,180. It is satisfactory that there is a reduction of Rs. 8,767 upon the average of establishment debitable to works, although it is Rs. 11,100 higher than in 1890-91. Mr. Thompson explains that the excess under the head of "Establishment" chargeable to works is due to a more correct classification of charges under the head of "Works and Establishment," and not to an increase of establishment. The total expenditure on maintenance proper, was then Rs. 9,88,180, to which Mr. Thompson adds Rs. 2,44,757 as cost of establishment proper, and Rs. 4,24,558 (at $\frac{1}{10}$ th of the revenue) for cost of collection. It seems a pity that the last item cannot also be excluded as unreal. If there were no Irrigation Department and the lands were cultivated on a regular rainfall, the Commissioner doubts whether the revenue establishments, employed to collect the land revenue, could be reduced below their present figure, and the village establishments are not paid by Government, but by the Village Cess Fund. The details for the past four year's figures are given in the following table:—

Works.			ESTABLISHMENT DEBITABLE TO WORKS.			Grand Total.
			Supervising.	Abkalani.	Total.	
...	...	7,21,023	52,296	1,47,130	1,99,426	9,20,440
...	...	7,83,915	62,055	1,19,547	1,81,602	9,65,517
...	...	8,01,214	69,118	1,06,983	1,76,101	9,77,315
1891-92	...	8,00,979	84,985	1,02,216	1,87,201	9,88,180

It is satisfactory that the Abkalani establishment has been reduced, though it will not be safe to cut down the men on the bunds too vigorously. The sum expended on canals and river embankments separately, including the establishment charged to works, are as follows:—

Year.			Canals.	River embankments.
1888-89	...	...	8,03,156	1,17,293
1889-90	...	...	8,64,912	1,00,605
1890-91	...	...	8,56,709	1,20,606
1891-92	...	...	8,36,789	1,51,391

Of the sum of Rs. 9,88,180, Rs. 5,08,867, a slightly larger proportion than last year, was spent on the removal of silt, and more than half of it in the Hyderabad and Fuleli Canals Districts, with the happy result which has been already noticed. Of the sum of Rs. 86,945 spent on river embankments, which is larger than usual, on repairs and making loops, &c. (Rs. 69,573 and Rs. 17,372), the Karachi Canals Bunds are responsible for Rs. 54,768, and there will be an equally large expenditure probably in the present year (1892-93) owing to the damages done by the recent high, if short, inundation. Government will notice that loop bunds, not ordinarily chargeable to maintenance, have this year been debited to that head to the amount of Rs. 10,596. Small works may occasionally be done out of the grant, but the precedent is a dangerous one. The charge per mile has been Rs. 250 on canals and Rs. 305 on bunds. But these figures include the total cost of public works establishments, and the so-called cost of collection.

11. Under Major works, the capital expenditure of Rs. 70,699, as during last year, was almost entirely incurred in the Eastern Nara and its connections.

The clearance between Jatri and Ketī is specially important, and the Commissioner is glad that its commencement is chronicled in 1891-92. The expenditure debitable to revenue under the same head, of Rs. 61,851, was incurred in making a new mouth to the Desert Canal, and clearing and widening the Begāri.

The expenditure from capital on Minor works, for which capital and revenue accounts are kept, was Rs. 36,102 in the Fuleli District, principally in the construction of two new regulators,—both works of the greatest importance,—and Rs. 16,506 was spent out of revenue on different small works. A sum of Rs. 49,236 spent on the Pritchard Canal, and Rs. 48,259 on the other new feeder to the Western Nāra are the principal items under the head of works, for which only revenue accounts are kept. The feeder to the Lohri Wah, it may be noted, will benefit the Kakkar Tāluka, not so much the Johi Tāluka.

12. The percentage of expenditure to revenue is 36·75 below the average, but in excess of last year; the trifling increase in the cost of maintenance per acre, 0·77, as against 0·75 in 1890-91, needs no comment, the more so, as part of the calculations are arbitrarily made, and of no particular value.

13. The table below compares the cultivation and revenue with those of the past two years :—

	1891-92.		1890-91.		1889-90.		Increase in 1891-92 as compared with 1890-91.		Decrease in 1891-92 as compared with 1890-91.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
CULTIVATION.										
Government Lands..	1,949,717		1,955,157		2,019,904		..		5,440	
Jāghir Lands ..	213,914		248,316		240,015		..		32,402	
Total Cultivation Acres		2,165,631		2,203,473		2,249,819		..		37,342
REVENUE.										
Treated in the Accounts as Indirect Revenue.										
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Consolidated Land and Water Assessment ..	51,46,672		50,98,756		63,26,625		47,916		..	
Deduct—Remissions ..	1,43,964		37,845		2,33,442		76,119		..	
Net Consolidated Assessment ..		50,02,708		50,30,911		50,94,251		..		28,203
Deduct—Land share ..	..	5,90,297	..	5,03,096	..	6,09,819	..	..	2,829	..
Irrigation or water share of net consolidated Assessment ..	..	45,02,441	..	45,27,815	..	45,83,032	..	..	..	25,374
Accounted for as Direct Receipts.										
Assessment of Jāghir cultivation ..	1,17,533		1,33,044		1,42,819		..		15,506	
Deduct Remissions..	10,035		..		1,590		10,035		..	
Miscellaneous Receipts (actuals) ..		1,07,503		1,33,044		1,41,229				25,541
	..	63,909	..	55,105	..	55,167	..	8,904	..	..
Total Direct Receipts ..		1,71,412		1,88,149		1,96,396		..	..	16,737
Total Canal Revenue ..		46,72,853		47,16,964		47,80,328		..	..	43,111

The distribution of the cultivation is shown in the subjoined table :—

	Area.			Increase or Decrease as compared with 1890-91.	Revenue.			Increase or Decrease for 1890-91.
	1891-92.	1890-91.	1889-90.		1891-92.	1890-91.	1889-90.	
	Acre.	Acre.	Acre.	Acre.	Rs.	Rs.	Rs.	Rs.
Government Lands—								
Kharif ..	1,513,533	1,595,939	1,722,040	—83,406	38,45,846	41,12,659	41,00,566	—2,66,813
Rabi ..	436,184	358,218	357,704	+77,968	11,56,862	9,18,252	9,32,685	+2,38,610
Total	1,949,717	1,955,157	2,109,804	—5,440	50,02,708	50,30,911	50,93,251	—28,203
Jāghir Lands—								
Kharif ..	177,288	203,341	214,591	—26,053	84,453	1,18,506	1,24,753	—34,053
Rabi ..	38,626	44,975	25,424	—6,349	23,050	14,538	16,476	+8,512
Total	215,914	248,316	240,015	—32,402	1,07,503	1,33,044	1,41,229	—25,541
Total—								
Kharif ..	1,690,821	1,800,280	1,936,631	—1,09,459	39,30,299	42,31,165	42,85,319	—3,00,866
Rabi ..	474,810	403,193	413,188	+71,617	11,79,912	9,32,790	9,49,161	+2,47,122
Total	2,165,631	2,203,473	2,349,819	—37,842	51,10,211	51,63,955	52,34,480	—53,744

The net decrease of Rs. 5,440 acres of cultivated area is accounted for in the following table:—

Canal Districts.	INCREASE.			DECREASE.		
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begári Canals ...	...	26,388	26,388	50,338	...	50,338
Shikárpur do. ...	...	23,740	23,740	9,557	...	9,557
Ghár do. ...	...	10,840	10,840	9,810	...	9,810
Western Nára Canals ...	8,565	20,981	29,546	...	...	...
Eastern Nára do. ...	...	...	...	12,363	6,054	18,417
Hyderabad do. ...	676	2,614	3,290	...	...	...
Fuleli do. ...	...	327	327	6,569	...	6,569
Karáchi do. ...	...	...	...	4,010	866	4,878
Total ...	9,241	84,888	94,129	92,647	6,922	99,569
<i>Deduct—Increase or Decrease ...</i>				9,241	84,888	94,129
Net Increase or Decrease ...				-83,406	+77,966	-5,440

The increase in rabi cultivation has been explained by Mr. Thompson as due to many of the cultivators being unable to take advantage of the inundation at first, and being deterred by the unseasonable fall of the river. This explains the remarkable increase under rabi in the Shikárpur Canals District, where, due to the failure of the Rohri floods, a great reduction in rabi would have been expected.

14. Table II—E, which is now given for the first time, as far as it can be filled in for this province, is partially reproduced below:—

		Gross Revenue.	Working Expenses.	WORKING EXPENSES.	
				Per cent. on gross Revenue.	Per cent. on irrigation.
Major Works.		Rs.	Rs.		
Begári Canal District...	{ Desert Canal ...	46,863	1,17,030	249.73	3.68
	{ Unharwah ...	16,864	9,500	56.33	0.49
	{ Begári Canal ...	2,77,757	90,000	32.40	0.62
Eastern Nára District...	{ Mithrao ...	2,54,842	65,052	25.53	0.55
	{ Thar Canal...	76,846	18,878	24.56	0.54
Total		6,73,172	3,00,460	44.38	0.86
Minor Works.					
Ghár Canal Districts ...	{ Sukkur Canal ...	1,49,385	43,541	29.15	0.50
	{ Ghár Canal ...	6,04,892	1,57,889	26.10	0.68
Hyderabad Canal District.	{ Mehrabwah ...	24,698	13,074	52.94	0.99
	{ Alibhar Kacheri ...	8,985	7,986	88.88	0.86
	{ Marak ...	62,739	47,928	70.39	1.02
	{ Surfraz ...	28,812	24,913	86.47	1.12
Fuleli Canal District ...	Fuleli ...	4,68,191	2,53,776	*128.03	0.94
Total Minor Works		13,47,702	5,49,107	40.74	0.81
Grand Total		20,20,874	8,49,567	42.07	0.82

* This figure appears wrong. It should be 54.2.

This table shows that the working expenses per acre irrigated have, on the average, been very much the same for Major and Minor works. But had the Desert Canal worked only reasonably well, the percentage of working expenses in Major works would be very much the smaller. The working expenses of the "Minor works" Canals are the heavier all round, the Fuleli appearing worst, and the Ghâr the best in this respect. The receipts from the Ghâr, shown in the form of 90 per cent. of the net consolidated assessment per acre, are far ahead of any other canal, namely, Rs. 2.55; the Mithrao and Thar Canals come next with Rs. 2.13 and Rs. 2.16 respectively. The Desert Canal is the worst, as it is in every return this year.

15. The next Table, III—IV, is also given for the first time this year, and it is interesting in showing the value per acre of the different crops grown. The estimated value of the produce has been calculated for the first time by Native Revenue Officers, checked by their Superiors, and is at best only approximate. The return will be still more interesting next year, and perhaps its accuracy will be easier to judge of, when the figures will be given for canals instead of for revenue districts.

Wheat, cotton and rice in this order are shown to have been most profitable, with the exception of "other crops" in the rabi season. The following table shows the value of wheat and oil-seeds per acre in the five Revenue Districts:—

District.	Wheat value per acre.	Oil-seeds value per acre.
	Rs.	Rs.
Karachi	18.44	15.60
Hyderabad	21.32	11.11
Shikarpur	23.30	24.52
Thar and Parkar	17.43	9.82
Upper Sind Frontier	17.70	17.29

The Commissioner has recently given instructions that the system of crop experiments, which have been carried on for some years in the Presidency proper by Assistant and District Deputy Collectors, should be extended to Sind, which will be useful for comparison with this table, as well as to revenue officers engaged in the work of land settlement. The table above shows a considerable diversity in the estimated value of different crops in the several districts.

16. The Commissioner will make only a few remarks on the workings of the principal canals.

The failure of the Desert Canal is shown by the following table:—

Begâri Canals District.

1890-91.	Average for three years ending 1899-00.	1891-92.
Acres.	Acres.	Acres.
124,919	96,947	60,110

The figures for revenue are not shown, as large remissions had to be given for causes not connected with the canal.

The Begâri Canal worked well in spite of the poor inundation, and the expenditure on it has been justified and repaid. The Begâri Canal. The Nurwâh branch worked particularly well, but the transfrontier tribes did not derive much benefit from it.

				1890-91.	Average.	1891-92.
				Acres.	Acres.	Acres.
Government Lands—						
Kharif	...	...	...	102,629	134,705	108,929
Rabi	...	...	...	15,609	8,972	37,497
				118,238	143,677	146,426
Jāghir Lands	...	...	...	25,815	37,254	28,293
Total cultivation				144,053	180,931	174,719
					Revenue.	
				Rs.	Rs.	Rs.
Kharif	...	...	...	2,21,860	2,92,337	2,39,450
Rabi	...	...	...	44,539	27,727	1,00,158
Total				2,66,399	3,20,064	3,39,608
Remissions—						
Kharif	...	...	...	3,379	5,272	23,658
Rabi	...	...	...	3,674	12,566	12,839
Total				7,053	17,838	36,497
Net Consolidated Revenue				2,59,346	3,02,225	3,03,111
...	...	...	...	2,33,411	2,72,003	2,72,799
...	...	...	...	28,041	39,725	14,129
...	...	...	...	314	443	225
Total Canal Revenue				2,61,766	3,12,171	2,87,153

But for the remissions, which were very heavy at the tail, owing to the sudden cessation of water for the Siramani lands and the absence of rain, there appears a considerable improvement on last year, and the results to be scarcely below the average of the past three years. The water-level in part of the Kāshmor Bund was unusually low, and there was a decrease of the wheat cultivation in consequence.

The Unharwāh, again, on which all the crops were destroyed, yielded only Rs. 6,041 of revenue. Owing to erosion at its mouth, it has been working badly also.

Thus, these two canals, the Desert and the Unharwāh, from no fault of man, which gave Government in 1890-91 a net profit of surplus revenue, after paying interest on direct capital outlay, of 15·35 and 6·78 respectively, in the year under report were worked, one at a positive loss, and the other with a profit of only 1·78. This is most regrettable. Had it not been for the river and the locusts, in spite of the poor inundation, they would have done well.

Shikārpur Canals District.
Sindwāh.

The Sindwāh which is the principal canal, gave a very good supply throughout the season.

				Average.	1890-91.	1891-92.
Total Acres				59,352	66,527	67,825
Total Revenue				1,55,226	1,79,323	1,87,916

The project for extending this canal, which is much needed, will be most remunerative.

The Rohri Canals had been considerably damaged in 1890-91 by the floods.

Consequently, though they had been well cleared, the cultivators were afraid or unwilling to sow, and they also held back in expectation of similar floods, and of obtaining a good rabi crop with small outlay. The water, which they were unwilling to use, breached the canals and some rabi cultivation was the result. The rabi crops were further assisted by the late rise of the river. The sum of Rs. 16,677 was realised as the canal share ($\frac{2}{10}$ ths) of sale of occupancy rights on these canals (Table VI--B.),--the largest sum credited on any system, and this, the Commissioner believes, is considerably below the mark. The following are the figures for Rohri Canals, taken from Table III :--

		Average from 1887-88 to 1889-90.	1890-91.	1891-92.
Area, Acres ...	...	81,671	66,762	77,684
Revenue Rs. ...	...	1,94,225	1,66,871	2,06,212

On the Sukkur-Begári Bund, two loops were made, costing Rs. 45,832, and none too soon. The old bund was cut away at the 32nd mile, and it is in danger at the 10th mile.

The total canal revenue, Rs. 3,96,945, is the highest for the district in the series of five years.

On this system, too, the total collections, Rs. 9,48,696, are the best

five years series in spite of the fact that the Sukkar and Ghár Canals, the cultivators not ready to take advantage of the full supply of water when the heads were opened on the 13th and 2nd June respectively. The experiment of opening the old head of the Sukkar Canal was made late in the kharif season, to assist the late kharif crops. There was a risk attending this,—of the old head being silted up, and the cold-weather supply endangered,—but fortunately the mouth worked well, and was re-opened in November for rabi cultivation. The matter was reported to Government, and Mr. Thompson's action was approved. There would have been great loss but for his timely orders :—

			1890-91.	Average.	1891-92.
			Acres.	Acres.	Acres.
Sukkur Canal—					
Total ...	...	...	66,527	82,166	89,343
				Revenue.	
			Rs.	Rs.	Rs.
Total ...	...	...	1,79,323	1,93,191	2,20,677
Ghár Canals—			Acres.	Acres.	Acres.
Total ...	...	...	253,114	204,567	239,369
				Revenue.	
			Rs.	Rs.	Rs.
Total ...	...	...	7,12,364	5,67,690	7,19,464

On the fine Ghár Canal, as everywhere else in Sind, there are complaints of scanty water at the tails, and this there will be in the best inundation, till money is available for increasing the supply. The thorough clearance of the ford Wáh, not long ago, is of the greatest benefit.

The Western Nára Canal worked very well throughout the season. Its feeder, the Pritchard Wáh, suffered much from erosion, and as yet comparatively little water has passed through it to assist the Western Nára. But the benefits of this canal and of the new feeder will be marked, it is hoped, in future years :—

				Acres.	Revenue. Rs.
1890-91	...	...	...	207,373	5,50,666
1891-92	...	...	...	206,938	5,55,043

The figures for the Munchar Lake have been given separately for the first time this year :—

				Acres.	Revenue. Rs.
1891-92	...	...	...	8,987	20,406

Could but means be devised for filling and emptying the lake rapidly, a lách of rupees is the least revenue that might be expected from it.

The larger canals in this system worked satisfactorily. There were no floods and no serious breaches. The total revenue collections amounted to Rs. 4,38,459, a smaller figure than in either of the previous two years, which may be attributed to the absence of any flood, on which rabi might have been raised in the unprotected area. The fluctuations of the river-rise affect this district particularly, as the canals have very low velocity, the land lies high, and the beds of the canals are also at a high elevation. It is satisfactory to see that the total revenue collections were Rs. 7,78,643, the largest during the past five years. The Dadwáh contributed to this. It has a supply of water was excellent :—

		1890-91.	Average.	1891-92.
Total, Acres	...	32,755	30,815	33,921
Total, Revenue	...	57,694	53,565	60,714

The Great Márah also shows better results :—

		1890-91.	Average.	1891-92.
Total, Acres	...	49,421	46,785	54,111
Total, Revenue	...	95,531	91,854	98,881

The Fuleli shows the following results :—

		1890-91.	Average.	1891-92.
Total, Acres	...	332,765	295,657	324,935
Total, Revenue	...	6,16,684	5,46,472	5,99,376

With the improvements in progress, this great canal will soon largely increase in work and revenue.

* The favourable character of the inundation in this district is seen in the total revenue collection of Rs. 4,38,248,—the largest of the five years' series. The percentage of total charges

Karáchi Canals District.

on the revenue is high (69·17), owing to the large sums spent, which have been already alluded to.

The figures of cultivation on the Pinyári, Kalri and Baghiar are given separately below :—

		1890-91.	Average.	1891-92.
Pinyári ...	{ Total, Acres ...	70,226	72,131	68,214
	{ „ Revenue ...	1,66,315	1,68,096	1,60,592
Kalri ...	{ Total, Acres ...	12,138	10,689	13,116
	{ „ Revenue ...	26,819	23,254	28,256
Baghiar ...	{ Total, Acres ...	26,063	20,920	27,239
	{ „ Revenue ...	53,085	39,797	54,613

The slight improvement in the Baghiar and Kalri is much discounted by the wide-spread ruin for which floods from breaches in their banks are responsible.

17. An examination of Table VIII (crop returns), shows that on the following five canals over half a lách of acres of rice have been grown :—

	Acres.
Ghár ...	132,542
Fuleli ...	127,702
Western Nára ...	63,078
Pinyári ...	59,569
Mithrao ...	53,182

Though no total for the Province has been given, the area does not seem to have changed much from last year, the Ghar and Mithrao showing an increase, and the others a decrease, but neither marked.

The largest cotton producers are the—

	Acres.
Mithrao ...	10,134
and the	
Gharo Mahmuda ...	14,110
Fuleli ...	13,688
Marak ...	10,522

which are all three in the Hyderabad District. The area under this staple of Fuleli is the largest in the past five years. On the other two canals there is falling off. There has been a marked increase in the area of cotton on the Eastern Nára, which, though small, has risen to 2,922 acres from 469 acres in 1888-89, and 151 acres in 1889-90, and 1,016 acres in 1890-91.

The increase of wheat cultivation has been very marked. The following eight canals grow the greatest quantity, and the area cultivated on all but the Fuleli, is far in excess of any previous year. The Fuleli crop is also the largest in the last five years, but the excess is not noticeable :—

	Acres.
Western Nára ...	42,791
Ghar ...	41,028
Rohri Canals ...	34,012
Sukkur ...	30,531
Mithrao ...	24,674
Sind ...	12,999
Fuleli ...	11,316
Begári ...	10,619

The oil-seed crop is also larger than usual. The increase is most noticeable on the Begári and Western Nára and, as in the case of wheat, the oil-seed crop on the Fuleli is the largest in its record. There has been a considerable falling off on the Ghár, and a decrease on the Eastern Nára. The areas of oil-seeds grown on the five largest producers are as follows :—

	Acres.
Begári ...	30,800
Fuleli ...	19,922
Western Nára ...	13,524
Ghár ...	12,374
Eastern Nára ...	6,946

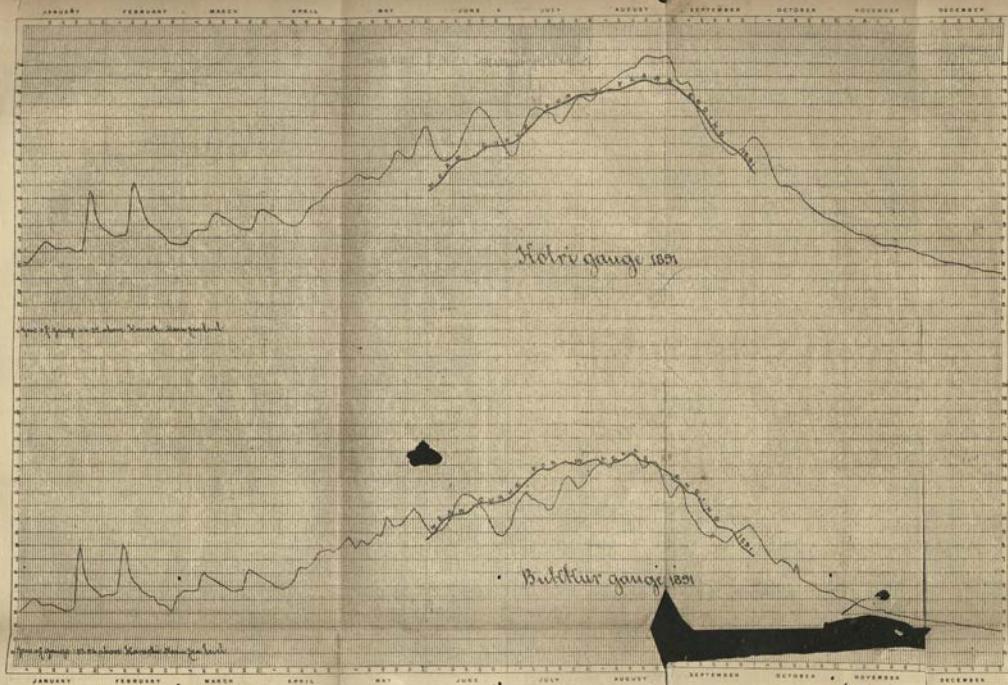
18. The new forms, I to III—E, modified to suit the Province have been submitted by Mr. Thompson with this report, as has been stated in his forwarding letter. The form, I—A, could not be prepared in time.

19. The report has been somewhat delayed in the preparation of the new tables and by alterations and additions to some of those existing.

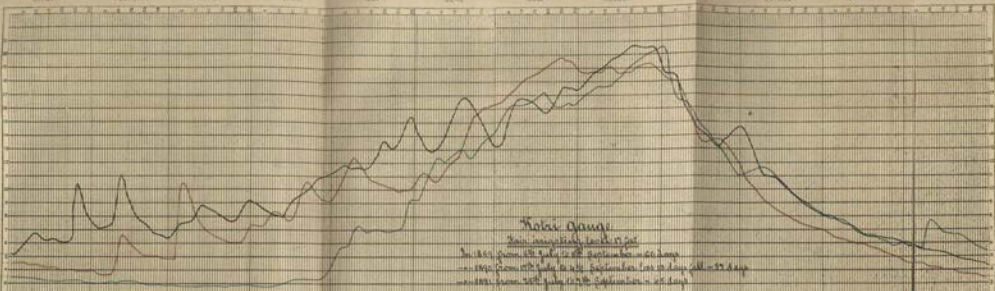
It reached the Commissioner when on his way to Jacobabad, where his time was entirely taken up by other work, and he has been compelled to march rapidly ever since. But he has lost no time in disposing of it. He had intended to print the papers locally, but he finds that this will further delay them, so he submits them in the usual form. If the mass of figures, which have to be compiled and if possible digested, be taken into account, as well as the changes in forms mastered and the fact that the Superintending Engineer is doing the full work of two officers of his grade, the delay will not seem unreasonable.

20. The Commissioner will, in conclusion, only remark that, taking everything into consideration, the results seem to him most satisfactory. A distinctly poor inundation, the Desert Canal and Unharwāh cultivation ruined for the year, no floods in Rohri, and cultivation restricted in expectation of them, a very poor Manchar Lake, and moderate floods in the south—in spite of all these obstacles the canal revenue has held its own. The Commissioner goes so far as to say, that were it not for the Superintending Engineer's unrivalled knowledge of Sind, and the needs of the various localities, and that he is ably assisted by a number of officers of Sind experience, there might have been a different tale to tell. For the task of apportioning the clearance grants where they are most wanted, of combatting the dangerous vagaries of the river, and judging where outlay will be most profitable from a revenue point of view, and at the same time providing the needed succour to cultivators when the supply of water fails, or when subject to ruinous floods, make the duty of the Superintending Engineer at once heavy, and most responsible. And it is only by constant watchfulness, good judgment and the strength to refuse money for maintenance when it is required for more urgent necessities elsewhere, that the administration can be successful. An Irrigation Committee was held in January at Hyderabad, whose report will, it is hoped, form a programme of future extensions and set at rest two heroic schemes for gigantic projects. It is hoped that in course of time the Committee's list of works will be carried out and the appointment of a second Superintending Engineer, as recommended, sanctioned. Wherever the Commissioner goes, he finds the Zamindārs appealing for more water, and schemes that would pay from 10 to 20 per cent. postponed for want of funds. For nearly a fortnight he has been travelling in the country watered by the tails of the Ghār, the Sukkur and the Begāri, and the need of more water, especially for the tracts lying on the frontier inhabited by Belūthis, has pressed itself strongly on him at every place. The Shikārpur Canal, when its turn comes, will cure complaints here and largely increase the Government revenue. On the present inundation canals of Sind, the cultivation may be said to have reached, or almost so, its outside limit, and the increase that has been so conspicuous of late years, both in cultivation and revenue will stop or become much reduced unless more water is taken from the river. Confident that Government will do their best for Sind with the funds at their disposal, the Commissioner need say no more on this subject. But he cannot conclude without once more appealing for an annual grant, which the Government of India have expressed their willingness to allow, to be expended on minor improvements by the Superintending Engineer, with the Commissioner's approval. Even if Rs. 1,20,000 and a limit of Rs. 10,000 per project (as recommended in paragraphs 85 and 86 of the Irrigation Committee's Report) is deemed excessive, the Commissioner would ask that as a beginning, say, Rs. 25,000 for expenditure on Minor and Rs. 10,000 on Major works, with a limit of Rs. 5,000 per project be given, and a special report could be made as to how the money has been spent. There are many cases which come to the Commissioner's notice on tour, where a comparatively small expenditure would result not only in increased revenue, but in removing hardship and extending the prosperity of the people. It is only an officer, who travels about the country and mixes with the Zamindārs, that can thoroughly appreciate the boon that such a grant would be. The Commissioner ventures, therefore, again to bring this subject to the favourable consideration of His Excellency in Council.

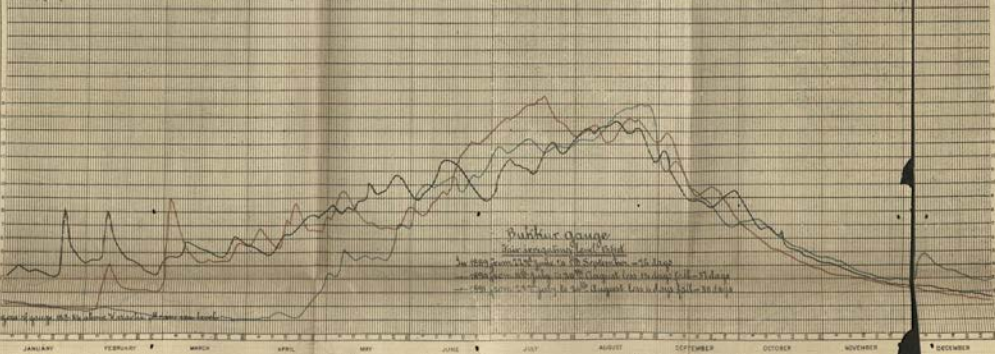
H. E. M. JAMES,
Commissioner in Sind.



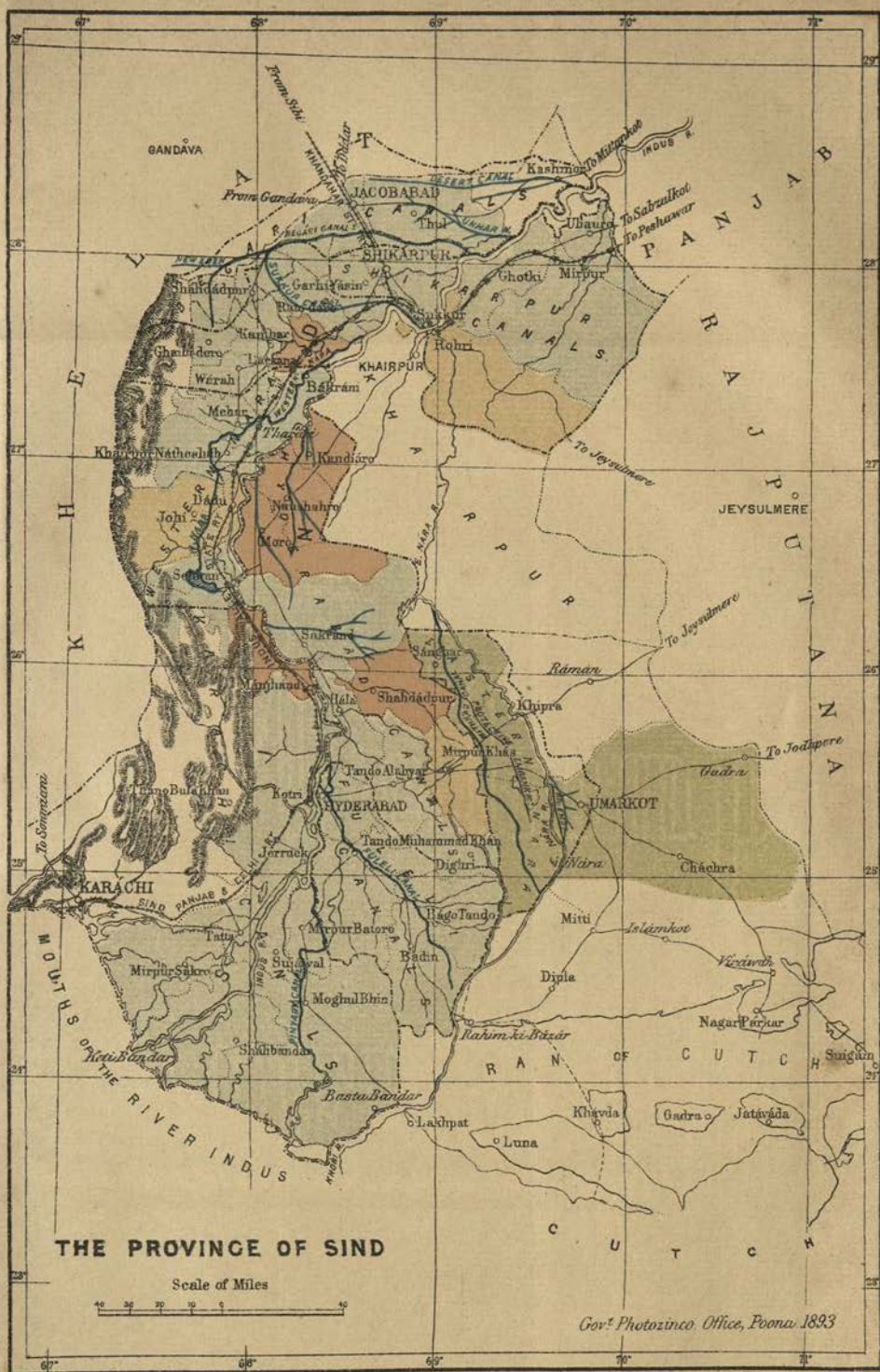
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER



Spill of gauge on 10th June 1887 from sea level



Spill of gauge on 10th June 1887 from sea level



References

Boundaries of canal Districts in dotted black. thus ————

Land under Revision Settlement ———— Red

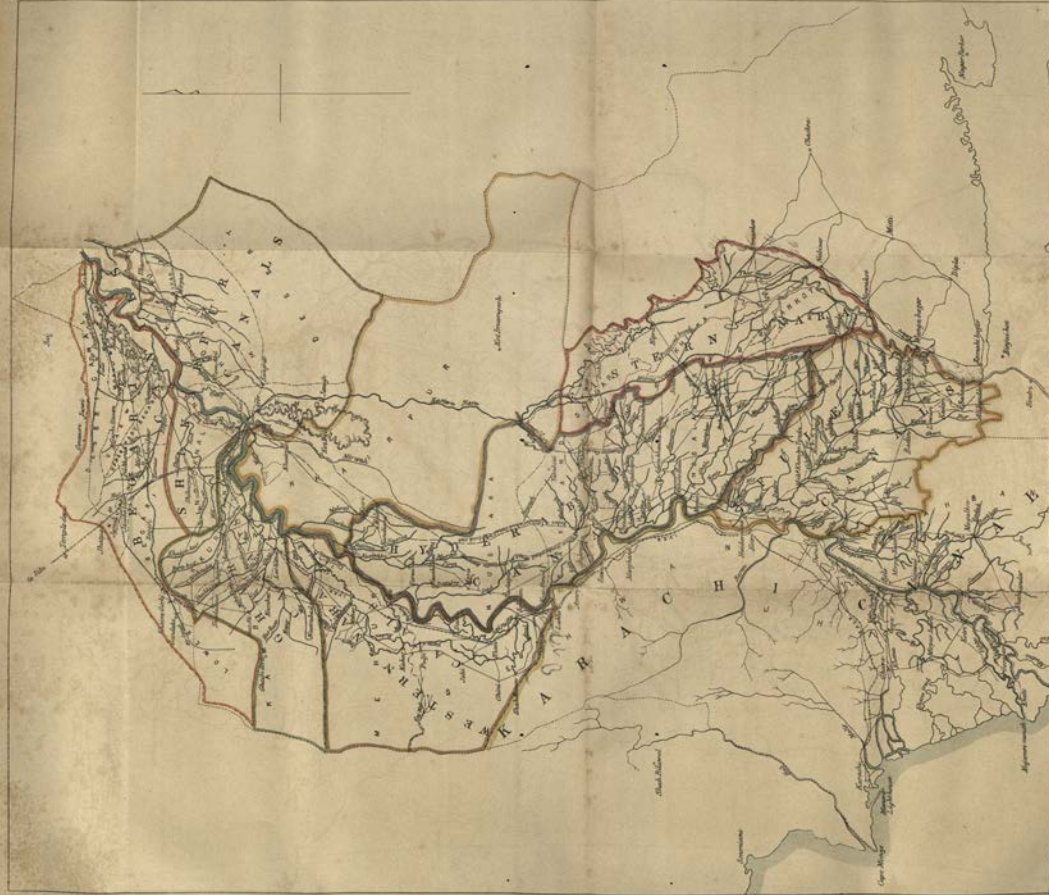
Land under Irrigational settlement ———— Blue

Land for which Irrigational settlement proposals have been submitted but not yet sanctioned. } ———— yellow

Land in the Shear and Parkhar District measured but not settled by settlement Department. } ———— green

H. M. M. M. M.

Superintending Engineer in Sind.



INDEX MAP
of the
PROVINCE OF SIND
to accompany Canal Revenue Report.

Send 10¢ bill to our bank:



New Roads ruled as far as possible in straight lines
Boundaries of Canal Districts shown in Blue lines
Lined Lines

Rogers Canal District Union	
Mt. Rogers	
Chap	
Western News	
Kylerbach	
Eastern News	
Violet	
Narachi	

H.H. Mir. Alimurad's Treasury

River Indus coloured blue - and
Canals

Genl. Thompson's Office, Paris, 1864

H. H. Hauptmann The Ins. Co.
Superintending Engineer
for Insurance
in Siam

Karachi 21st September 1969

*Revenue Report of Irrigation Works in
Sind for 1891-92—Review of the.*

No. 41 W. I.—658 OF 1893.

Public Works Department.

Bombay Castle,
26th April 1893.

Letter from the Superintending Engineer in Sind, No. 24, dated 4th January 1893.

Submits the Irrigation Revenue Report of Irrigation Works in Sind for 1891-92, with statements, maps and charts.

Memorandum from the Commissioner in Sind, No. 281, dated 24th January 1893.

Forwards the above with remarks.

RESOLUTION.—The inundation of 1891 was, on the whole, a poor one—low, short and fluctuating. For the southern districts it was more favourable than for the northern districts, in which it was worse than that of the previous year. The rise commenced early and continued till the end of June, when the first serious fall took place, and was succeeded by others. The maximum reading at Bakkar was only 14' 9", or 1' 3" less than that of 1890; while the Kotri gauge reached 20' 7", which was also the highest reading of the previous year.

The rainfall was insignificant and less than usual, and as there were no floods the province depended solely on the inundation and on the capabilities of the canals to distribute it.

A fluctuating inundation like the one under notice is peculiarly trying to high-level canals. An early rise fills most of these canals before water is required, and each subsequent fall leaves a deposit, and thus reduces its future carrying capacity. The report shows that notwithstanding this the complaints for want or deficiency of water were very few, and that all canals, with the exception of the Desert Canal, worked wonderfully well under exceptionally trying circumstances. The dhand by which the Desert Canal is fed, was destroyed by the sudden set of the river on to a sand-bank, which it eroded and carried down, depositing the sand in the mouths of the dhand and of the canal. The Pritchard Canal also is said to have suffered from erosion at its mouth, but the result was partially neutralized by the unusually good supply in the Western Nára.

2. The mileage of canals and river embankments was 5,868 and 659 as compared with 5,944 and 653 miles in the previous year. This shows that during the year under report the length of canals was shortened by 76 miles, which is attributed chiefly to corrections in measurement, improvement of alignment, &c. The length of bunds shows an increase of 6 miles owing to completion of the Bhaiti bund in the Eastern Nára District.

3. The table in paragraph 13 of the Commissioner's review shows that as compared with 1890-91

Area of cultivation.		Kharif.	Rabi.	Total.
		Acres.	Acres.	Acres.
*1890-91.				
Government lands	...	1,596,939	358,218	1,955,157
Khelát do.	...	61,966	1,778	63,744
Jághir do.	...	141,775	43,197	184,972
Total	...	1,800,280	403,193	2,203,473
1891-92.				
Government lands	...	1,513,533	436,184	1,949,717
Khelát do.	...	59,891	10,831	70,722
Jághir do.	...	137,397	27,785	165,182
Total	...	1,690,821	474,810	2,165,631
Decrease.				
Government lands	...	83,406	177,966	5,440
Khelát do.	...	22,075	49,053	13,022
Jághir do.	...	3,978	15,402	19,380
Total	...	109,459	471,617	37,842

† Increases.

the area of cultivation fell from 2,203,473* acres to 2,165,631* acres, showing a net decrease of 37,842 acres, or 1·7 per cent., and that the total canal revenue fell from Rs. 47,15,964 to Rs. 46,73,853, showing a decrease of Rs. 42,111, or less than one per cent. The area of cultivation under Government lands, though less than that of the previous year by 5,440 acres, exceeds the average of five previous years by 109,755 acres.

4. The figures above given show that the total decrease of 37,842 acres was made up of a decrease of 109,459 acres under kharif and an increase of 71,617 acres under rabi. The decrease under kharif is made up as follows :—

			Acres.
Major Works	...	...	84,274
Minor Works—			
Capital	...	...	14,840
Revenue	...	...	9,831
Agricultural	...	...	514
Total			1,09,459

The decrease under Major Works is most considerable, and is distributed as follows :—

			Acres.
Government lands	...	...	62,187
Khelát lands	...	...	22,075
Jághir „	...	...	12
Total			84,274

Of the decrease under Government lands, the Desert Canal is responsible for 52,255 acres. The decrease under Minor Works is made up of small increases and decreases on several works. The canals in the Shikárpur and Ghár districts show a decrease of over 9,000 acres, while those in the Western Nára show an increase of over 8,000 acres.

5. The rabi area under Government lands shows a considerable increase, while in that under Jághir lands there is a diminution of 15,402 acres in British Jághir taken alone, and a net decrease of 6,349 in British and Foreign Jághirs taken together. The net increase of 71,617 acres is made up as follows :—

			Acres.
Major Works	...	...	32,403
Minor Works—			
Capital	...	...	1,048
Revenue	...	...	38,494
Agricultural	...	...	—328
Total			71,617

The increase is most noticeable under Major Works and works for which only revenue accounts are kept. The total increase on Government lands is 77,966 acres, which is reduced to 71,617 by taking into account the net decrease of 6,349 acres on Jághir lands. The most noticeable increase is on the Begári Canal and the canals in Rohri. The canals in Western Nára also together show an increase of over 20,000 acres.

6. The figures of area of cultivation and revenue for 1891-92 given in paragraph 3 above are distributed as follows :—

			Area. Acres.	Revenue. Rs.
Major Works	...	...	466,083	7,87,998
Minor Works—				
Capital	...	...	759,071	17,16,812
Revenue	...	...	936,760	21,62,028
Agricultural	...	...	3,717	7,015
Total			2,165,631	46,73,853

The corresponding figures for 1890-91 are :—

		Area. Acres.	Revenue. Rs.
Major Works	...	517,954	9,39,634
Minor Works—			
Capital	...	772,863	17,20,491
Revenue	...	908,097	20,46,423
Agricultural	...	4,559	9,416
Total	...	2,203,473	47,15,964

The figures above given show that the Major Works account for 51,871 acres, while the works for which only revenue accounts are kept show an increase of 28,663 acres, the corresponding decrease and increase in revenue being Rs. 1,51,636 and Rs. 1,15,605 respectively.

7. The Superintending Engineer observes that the rabi crop is the largest during the last six years, while the kharif is the smallest since 1887-88. Under Minor Works the cultivation is the largest on record, with the exception of that for the year 1889-90. The causes which operated to reduce the kharif area are represented to be lowness of the river in June, the late rise and the high price of wheat, and the same causes contributed to the remarkable increase in rabi cultivation. It has been explained that many of the cultivators were unable to take advantage of the inundation at first, and were deterred by the unseasonable fall of the river, and this accounts for the very great increase under rabi in the Shikárpur Canals District, where owing to the failure of the Rohri floods a great reduction in rabi would have been expected. The large rabi area was commented on last year; but, the Commissioner observes, the Sind canals deserve the more credit this year from the fact that only one slight flood occurred north of Kotri, and all the rest of the rabi crops depended on canal water for their irrigation. The Commissioner further remarks that the canals generally all over Sind were able to distribute advantageously the late inundation under trying circumstances—a fact that testifies to the judicious manner in which the Superintending Engineer carried out the clearance and maintenance of the canals, aided by a zealous and capable staff. This is very satisfactory.

Distribution of cultivation
of Jágírh lands.

8. The details of cultivation in Jágírh lands are as follows :—

Kharif.

	1891-92.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
<i>Foreign Jágírh.</i>				
Khelát lands	39,891	61,966	...	22,075
<i>British Jágírh.</i>				
Upper Sind Frontier	743	1,312	...	569
Shikárpur	22,673	23,792	...	1,119
Thar and Párkár	1,838	1,722	116	...
Hyderabad	99,184	1,00,324	...	1,140
Karáchi	12,959	14,225	...	1,266
Total	137,397	141,375	...	3,978
Grand Total ..	177,288	203,341	...	26,053

Rabi.

	1891-92.	1890-91.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
<i>Foreign Jágíir.</i>				
Khelát lands	10,831	1,778	9,053	...
<i>British Jágíir.</i>				
Upper Sind Frontier	198	248	...	50
Shikárpur	12,853	27,556	...	14,703
Thar and Párkar	546	39	507	...
Hyderabad	7,815	8,384	...	569
Karáchi	6,383	6,970	...	587
Total	27,795	43,197	...	15,402
Grand Total	38,626	44,975	...	6,349

It will be seen from the figures in the above statements that the kharif area has decreased in all districts with the unimportant exception of Thar and Párkar, and that the rabi area has increased in Khelát Territory, while it shows appreciable diminution in the Shikárpur District. The decrease under kharif is mainly due to the failure of the Desert Canal; the increase of rabi in Khelát is made up of 5,223 acres on the Begári and 3,830 on the Desert Canal. The latter canal was fed towards the close of the season from the lower end, the up-stream mouth of the dhand having failed.

Areas cultivated by districts and percentage of kharif to rabi.

9. The following statement shows the areas cultivated and the percentage of kharif to rabi in the several districts :—

Canal District.	Government Lands.			Jágíir Lands.			Total.			Percentage.	
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begári Canals	149,061	32,122	201,203	44,815	11,828	56,644	193,896	63,650	257,549	75	25
Shikárpur "	85,463	51,656	135,524	6,190	3,795	9,985	90,653	55,451	145,509	62	38
Ghár "	228,297	91,983	319,599	7,171	2,161	9,332	235,468	93,244	328,712	71	29
Western Nára "	162,875	85,728	246,603	11,448	5,617	17,065	174,323	91,345	265,668	66	34
Eastern Nára "	142,837	65,116	208,455	1,545	5,148	6,693	144,385	67,266	211,931	68	32
Hyderabad Canals "	329,912	32,430	362,543	48,880	2,179	51,069	378,801	34,809	413,610	90	10
Fuleli "	246,204	43,637	289,841	50,295	5,636	55,931	298,499	49,273	345,772	86	14
Karáchi "	170,459	18,210	188,669	6,629	2,262	8,891	177,083	21,472	198,560	82	18
Total	1,513,533	436,184	1,949,717	177,288	38,626	215,914	1,690,821	474,810	2,165,631	78	22
Percentage	77	33	100	82	18	100	28	22	100	...	...

The percentage of kharif is the largest in the Fuleli District. The percentage of rabi is, as in the case of last year, the largest in the Shikárpur, Ghár, Western Nára and Eastern Nára districts.

10. A crop return for five years ending 1891-92 has been submitted in the same form as last year; addition has, however, been made to the abstract, to show the areas under different crops. This is a useful addition. A separate crop return has also been submitted, showing the areas under different crops for Government and Jágíir lands for 1891-92.

Proportion of flow to lift cultivation.

11. The following statement shows the proportion of flow to lift cultivation for each canal district for the year 1891-92 :—

Canal District.	Lift.	Flow.	Total.	PERCENTAGE.		
				Lift.	Flow.	Total.
	Acres.	Acres.	Acres.			
Begári Canals ...	24,306	197,367	221,673	11	89	100
Shikárpur „ ...	21,834	113,743	135,577	16	84	100
Ghár „ ...	17,976	306,060	324,036	6	94	100
Western Nára ...	62,577	184,026	246,603	25	75	100
Eastern Nára ...	49,250	155,696	204,955	24	76	100
Hyderabad Canals ...	311,161	51,381	362,542	86	14	100
Fuleli „ ...	94,733	195,108	289,841	33	67	100
Karáchi „ ...	30,268	159,401	189,669	16	84	100
Total Acres ...	612,114	1,362,782	1,974,896	31	69	100

The percentages of lift to flow irrigation are nearly the same as last year.

In commenting on this subject last year, Government observed that the inclusion of large areas cultivated on spill and flood water in the figures of flow cultivation renders those figures misleading, and the Commissioner in Sind was asked to state whether, to increase the reliability of the statistics, it is possible to distinguish 'flood' and 'spill' irrigation from 'flow'. The attention of the Commissioner should again be requested to this matter.

12. Under paragraph 33 of the Superintending Engineer's report a statement has been furnished similar to that given in paragraph 16 of Government Resolution reviewing the report for 1890-91, showing the areas of the principal crops irrigated during 1891-92. The Superintending Engineer has for convenience of reference, shown in the same statements the percentages of kharif and rabi and flow and lift. The percentages in the case of kharif and rabi, however, do not correspond with those given in the last column of the statement appearing in paragraph 9 above, as the former refer to Government lands only and the latter include Jágírh lands.

The kharif is the chief crop in Sind, being 77 per cent. of the whole. In the Fuleli, Eastern Nára and Ghár districts, rice is the staple crop; while jowári and bájri are chiefly grown in Begári, Hyderabad, Shikárpur, Western Nára and Karáchi. There is also a large area of rice in the three latter districts. The cotton crop is produced almost entirely in Hyderabad and Eastern Nára, with a fair area in Fuleli. The principal rabi districts are the Ghár, Western Nára Eastern Nára and the Begári. The largest rabi crop is grown on the Ghár Canals. The chief rabi crop is wheat, but there is a large area under oil-seeds.

Details of principal crops cultivated. The areas under the several crops compare with those of the last year as follows :—

				1890-91.	1891-92.	Difference.
				Acres.	Acres.	Acres.
Kharif	...	{	Rice	640,070	620,492	—19,578
			Jowári	401,215	367,847	—33,368
			Bajri	339,899	305,756	—34,143
			Cotton	86,458	82,098	—4,370
			Other crops	121,308	137,346	+16,038
Total Kharif ...				1,588,960	1,513,539	—75,421
Rabi	...	{	Wheat	182,576	271,670	+89,094
			Barley	12,313	15,541	+3,228
			Oil-seeds	100,595	120,550	+19,955
			Other crops	59,965	53,596	—6,369
Total Rabi ...				355,449	461,357	+105,908
Grand Total, Kharif and Rabi				1,944,409	1,974,896	+30,487

Under kharif there is a noticeable decrease under bājri, jowāri and rice, while there is an increase under other crops. Under rabi there is a most remarkable increase under wheat.

13. The figures of total area given in the preceding paragraph, as well as those in paragraph 11 above, do not correspond with those in the other statements accompanying the report. The difference is due to the inclusion of 25,179 acres on account of dubari (twice cropped) cultivation. In the year under report, the total area of this kind of cultivation amounted to 219,768 acres for four of the five revenue districts in Sind, figures for Hyderabad not being included. The dubari crops are assessed at 4 annas per acre, and the receipts are included in the net consolidated revenue, whereas the area on which the second crop is raised is not included in the area. If this area be added to that of cultivation, as given in the several statements, the total area will amount to 2,385,399 acres.

14. The gross revenue, as compared with the previous year, was as follows :—

	1891-92.	1890-91.	Increase.	Decrease.
<i>Government Land.</i>	Rs.	Rs.	Rs.	Rs.
Consolidated assessments... ..	51,46,672	50,98,756	47,916	.....
<i>Deduct—</i>				
Remissions	1,43,964	67,845	76,119	.....
Net consolidated assessments	50,02,708	50,30,911	.....	28,203
<i>Deduct—</i>				
Land share	5,00,267	5,03,096	.....	2,829
Irrigation share of net consolidated assessments	45,02,441	45,27,815	.....	25,374
<i>Jāghir Land.</i>				
Assessment on Khelāt lands	50,725	63,747	.....	13,022
Do. on British Jāghir lands	66,813	69,297	.....	2,484
	1,17,538	1,33,044	.....	15,506
<i>Deduct—</i>				
Remissions	10,035	.....	10,035	.....
	1,07,503	1,33,044	.....	25,541
Total net assessed revenue	46,09,944	46,60,859	.....	50,915
Miscellaneous receipts—Actuals... ..	63,909	55,105	8,804	.....
Total Canal Revenue	46,73,853	47,15,964	.....	42,111

The distribution of the canal revenue under Major and Minor Works for the years 1890-91 and 1891-92 is given in paragraph 6 above. Major Works show a decrease of Rs. 1,51,636, and Minor Works an increase of Rs. 1,15,605, but comparing the totals of the two years there is a satisfactory increase in 1891-92. The generally favorable character of the results is no doubt due to improvement of canals and increased security from floods, and more particularly, in the case of the Minor Works, to rectification of defects and more thorough clearance. It would have been equally apparent in the case of Major Works but for the failure of the Desert Canal.

In paragraph 11 of his report the Superintending Engineer remarks as follows :—

“The assessment does not vary directly with the cultivation, and it is a very satisfactory feature in the returns for the year under report that the figures of assessment compare more

favourably with those of previous year than do those of cultivation. It is satisfactory for this reason, that it suggests a general improvement in the character of the cultivation and the growth of more valuable crops, which, under the settlement now almost universally in force in Sind, pay higher rates."

The Commissioner in Sind takes exception to these remarks as being scarcely borne out by facts, and the attention of the Superintending Engineer should be invited to the Commissioner's remarks in paragraph 4 of his forwarding memorandum.

Under British Jágírh the total assessment was Rs. 66,813, which is the highest on record, excepting the year 1890-91.

The assessment for Khelát lands, excluding remissions, was Rs. 40,690, being Rs. 23,981 below the average for the last five years. The Commissioner observes that the figures of remissions in the case of these lands are misleading, as they are for the previous year though sanctioned in the year under report.

15. The remissions for the year amount to Rs. 1,43,964, but it is satisfactory to notice that, with the exception of the Ghár, they are not due to deficiency of supply. The remissions in the Upper Sind Frontier District alone amounted to Rs. 1,06,401, and were mostly due to repeated damage by locusts. In the Karáchi District the remissions are said to be almost all due to floods from breaches in river embankments and from spill from the Bághar. Plans and estimates for embankments on the Bághar have recently been sanctioned, and it is hoped that the evil effects of spill will be minimized in future.

16. A sum of Rs. 39,233 has to be added to the canal revenue for the year on account of irrigation share of net consolidated assessment on unauthorized cultivation. This amount has not been included in any of the statements accompanying the report, as information regarding it was not received in time. The Commissioner states that after making full enquiries on the subject he has issued instructions which, he hopes, will tend to enable cultivators to obtain land that they require without delay, so that the amount of fines imposed on persons cultivating without permission may be reduced.

Adding this amount to the irrigation share of the net consolidated revenue (Rs. 45,02,441), the total comes to Rs. 45,41,674.

17. The comparison between assessments and realizations stands as follows :—

	Government Lands.	Khelát Lands.	British Jágírh.	Total.
	Rs.	Rs.	Rs.	Rs.
Unrealized balance at the end of 1890-91.	85,521	23,734	15,480	1,24,735
<i>Deduct—</i>				
Remissions on account of former years.	29,261	10,035	.....	39,296
	56,260	13,699	15,480	85,439
Assessments during year...	50,02,708	50,725	66,813	51,20,246
Total for collection...	50,58,968	64,424	82,293	52,05,685
Actual receipts...	50,01,047	20,741	71,396	50,93,184
Balance outstanding...	57,921	43,683	10,897	1,12,501

The balances shown as outstanding at the beginning of the year differ from those shown in last year's report as follows :—

	Now shown.	Shown in last year's report.	Difference.
	Rs.	Rs.	Rs.
Government lands	... 85,521	85,467	54
Khelát "	... 23,734	23,735	1
Jágírh "	... 15,480	15,447	33

The difference has not been explained, but it is stated that the figures now given have been communicated as correct by the Revenue Department.

The total for collection under Government lands shows a falling off of Rs. 35,612, which is made up of a large falling off of Rs. 1,27,067 in Upper Sind Frontier and smaller decreases in Thar and Párkár and Hyderabad, and an increase of Rs. 98,328 and Rs. 32,615 in the Shikárpur and Karáchi districts respectively. The outstandings show a reduction of Rs. 27,546, which is satisfactory.

Under Khelát and Jágghir lands the falling off in the amount for collection is inconsiderable, and the outstanding balances are respectively Rs. 43,683 and Rs. 10,897. As regards the former, the Superintending Engineer states that the returns are made up on 31st March before the third instalment of revenue is due, and therefore the sums unpaid are not outstanding in the proper sense of the term. As regards the latter, the Commissioner observes that the amount probably represents the sum not then due, and collected after the canal return No. IX was sent, and that the true balance of Jágghir hakaba only amounted to Rs. 217-12-0.

	Rs.
* Gross ...	50,01,947
Deduct—	
Land share ...	5,00,103
	<u>Rs. 45,00,944</u>

18. The irrigation share of actual collections in Government lands amounted to Rs. 45,00,944,* and the total canal revenue on the basis of actual realizations thus amounted to —

	Rs.	Rs.
Government lands ...	...	45,00,944
Khelát lands ...	20,741	...
British Jágghir lands ...	71,396	...
Realized by the Public Works Department ...	263	...
		<u>92,400</u>
Miscellaneous receipts ...	...	63,909
		<u>Total Rs. 46,57,253</u>

against Rs. 46,84,696 realized in 1890-91.

19. The credit for interest on the irrigation share of the proceeds of the sales of occupancy in lands benefited by the canals amounted to Rs. 5,569. In all 52,913 acres were sold, which realized Rs. 1,54,718, the irrigation share ($\frac{9}{10}$ th) of which was Rs. 1,39,247, and four per cent. on this irrigation share comes to Rs. 5,569. The credit to end of 1890-91 was Rs. 15,066, against which Rs. 13 were to be adjusted on account of an error, leaving Rs. 15,053, which with Rs. 5,569 makes Rs. 20,622, which is the amount shown in Table VI, VIA and Statement C—3 in the body of the report. The Commissioner is correct in remarking that the Superintending Engineer's statement at the end of paragraph 19, that 52,913 acres were sold, yielding Rs. 20,622, is wrong. As observed last year, the credit is a cumulative one, and it would be more correct to say that 52,913 acres were sold yielding Rs. 5,569, which with the credit for the previous two years makes the credit for 1891-92 Rs. 20,622.

In connection with this credit, the Commissioner suggests a doubt whether the recording of such a very indirect gain, *in addition* to crediting the canals directly with $\frac{9}{10}$ ths of the actual sums realized, does not tend to invest the statistics with an air of unreality, as well as to lead to confusion, or at least to mistaken ideas of the financial results of the canals on the part of the uninitiated. Since 1889-90 no share of the actual sale proceeds of land has been credited to the canals, but only the interest on $\frac{9}{10}$ ths of such proceeds, and that the reasons, which induced the Government of India to introduce this credit, are contained in their Resolution No. 53 A. I., dated 20th June 1889, embodied in the preamble of Government Resolution No. 94 A. I.—1209, dated 10th July 1889.

The error in the figures pointed out by the Commissioner should be explained by the Superintending Engineer in Sind.

In passing orders on the project for improvements to the Rajib, Chitti and Garang canals, Government, in paragraph 5 of Government Resolution No. 136 W. I.—1566, dated 4th October 1892, inculcated the necessity of observ-

ing caution in levying heavy fees for the right of occupancy. The Commissioner reports that he has taken steps to carry out the wishes of Government, and he expects that the occupancy fees are not likely again to be very high.

20. With this addition the actual credits to the canals for 1891-92 amounted to Rs. 46,77,875. This amount is accounted for as follows:—

Exhibited in the Examiner's General Abstract of financial results.

Works for which Capital and Revenue Accounts are kept—

			Rs.	Rs.
Major Works	...	...	7,37,837	
Minor Works	...	...	13,56,425	
				20,94,262
Works for which only Revenue Accounts are kept	...	...		21,73,567
Agricultural Works	...	...		7,039
		Total shown in the accounts	...	42,74,868

Add—

Net revenue due to certain of the works before improvement	...	...	...	4,03,007
--	-----	-----	-----	----------

Grand Total Rs. ... 46,77,875

21. Orders have now been issued in Government Resolution No. 44 A. I.—359, dated 23th February 1893, on the subject of deduction of the former net revenue, on works which have been improved. The Government of India have prescribed revised forms of financial statements which will be adopted for the year 1892-93.

22. Paragraph 22 of the report deals with the loss to canals represented by the difference between hakaba and the assessments at ordinary rates. Among the accompaniments to the report also there is a statement prepared by the Examiner of Public Works Accounts showing the details of this loss. This loss was formerly shown in the returns, but at the suggestion of the Government of India it has with effect from 1889-90 been omitted, on the grounds that hypothetical figures should be distinguished from actuals. It, however, continues to be shown in the report itself; but even this is now unnecessary, as stated in paragraph 5 of Government Resolution No. 137 A. I.—1719, dated 10th October 1891.

In paragraph 4 of the same Resolution, Government approved of the proposal of the Commissioner in Sind, that the proportionate share of the cost of clearances and improvements assignable to supplying water to Jágghir lands should be shown separately, but this does not appear to have been done in the present report.

23. The question of the possibility of obtaining an enhanced revenue from the water rate levied on Jágghir cultivation received the consideration of Government in the Revenue Department during the year under report, and it was resolved in Government Resolution No. 6321, dated 15th September 1891, not to make any modifications in rates, in the direction of enhancement, pending receipt of the results of the examination of the facts on the Fuleli system of canals and to what extent defects detected can be remedied under existing orders. The Commissioner has submitted his further report, but the materials for a final consideration of the matter are not yet available.

24. The entire expenditure of the year is shown, in the Examiner's general abstract of financial result, to have been—

Capital.

				Rs.
Major Works	...	...	...	91,506
Minor Works	...	...	...	44,254
				135,760

Revenue.

	Rs.
Major Works	3,44,564
Minor Works—	
Works for which Capital and Revenue Accounts are kept	5,49,107
	8,93,671
Works for which only Revenue Accounts are kept	9,74,554
Agricultural Works	1,54,348
Total Revenue	20,22,573
Grand Total	21,58,333

The figures of revenue expenditure above given compare with those in Table IV as follows:—

	Figures from Examiner's Accounts.	Figures from Table IV.	Difference.
	Rs.	Rs.	Rs.
Major Works	3,44,564	3,44,564	...
Minor Works—			
Works for which Capital and Revenue Accounts are kept	5,49,107	5,49,107	...
Works for which only Revenue Accounts are kept	9,74,554	9,79,016	+ 4,462
Agricultural Works	1,54,348	1,49,886	- 4,462
Total	20,22,573	20,22,573	...

From the above comparison it will be seen that while there is no difference in the total, the figures in Table IV, under works for which only revenue accounts are kept, show an increase of Rs. 4,462, and the agricultural works a corresponding decrease. Apparently the charges on account of the mathematical instruments depôt and certain establishments in Hyderabad, which are debited in the Examiner's accounts to the head 'Agricultural Works', have been wrongly classified under works for which only revenue accounts are kept. The attention of the Superintending Engineer should be drawn to the matter.

25. The following abstract gives the details of the expenditure of the year on each class of canals:—

	DIRECT CHARGES.					INDIRECT CHARGES.			Revenue Collection.	Grand Total.
	Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Leave and Pension Allowances.	Capitalization.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Capital Expenditure.</i>										
Major Works	70,699	...	17,513	842	89,054	2,452	...	2,452	...	91,506
Minor Works	36,102	...	7,151	...	43,253	1,001	...	1,001	...	44,254
Total Capital outlay ...	1,00,801	...	24,664	842	1,32,207	3,453	...	3,453	...	1,35,760
<i>Revenue Expenditure.</i>										
Major Works	61,851	1,81,919	60,667	5,693	2,60,130	9,210	...	9,210	75,224	3,44,564
Minor Works—										
Works for which Capital and Revenue Accounts are kept	16,608	3,06,977	78,042	1,543	4,03,068	10,927	1,400	12,327	1,33,713	5,49,107
Works for which only Revenue Accounts are kept	1,38,115	4,79,467	1,39,215	2,725	7,59,522	...	...	...	2,15,032	9,74,554
Agricultural works for which neither Capital nor Revenue Accounts are kept ...	49,352	69,817	32,598	991	1,53,758	...	...	...	590	1,54,348
Total Minor Works ...	2,03,973	8,56,261	2,50,855	5,259	13,16,348	10,927	1,400	12,327	3,49,334	16,98,009
Total Revenue Expenditure ...	2,65,824	9,88,180	3,11,522	10,952	15,76,478	20,137	1,400	21,337	4,24,559	20,22,573
Grand Total outlay, 1891-92 ...	3,72,625	9,88,180	3,36,686	11,794	17,08,785	23,590	1,400	24,990	4,24,558	21,58,333
Grand Total outlay, 1890-91 ...	4,33,755	9,77,315	3,28,434	7,182	17,46,686	18,811	3,251	22,062	4,22,001	21,99,749

26. The capital expenditure under the head Major Works exceeded that of the previous year by Rs. 7,038. The expenditure was almost all incurred on the Eastern Nára Works. Under Minor Works the whole capital expenditure was on the new Fuleli regulators and chaukis.

27. The outlay on extensions and improvements amounted to Rs. 2,65,824 as compared with Rs. 3,52,620 in the year 1890-91. Outlay on extensions and improvements. Of this Rs. 61,851 under Major Works were spent chiefly in connection with the excavation of a new mouth for the Desert Canal and clearing and widening the Begári Canal: Rs. 16,506 were expended on works for which capital and revenue accounts are kept, and principally on the Surfrazwáh and Fuleli Canal (*not* Fuleli and Ren, as stated by the Superintending Engineer, the latter work belonging to the category of works for which only revenue accounts are kept): Rs. 1,38,115 on works for which only revenue accounts are kept, the principal expenditure being on the new feeder to the Western Nára and improvements to main canal (Rs. 48,259) and excavation of a feeder to the Pritchard Canal (Rs. 49,236) and Rs. 49,352 on agricultural works for construction of loops to prevent breaches and provide protection for cultivation.

The Commissioner in Sind has again represented the desirability of investing the Superintending Engineer with increased powers to sanction small works of improvement and of allotting a discretionary grant. As at beginning, Mr. James asks that Rs. 25,000 for expenditure on Minor Works and Rs. 10,000 for Major Works, with a limit of Rs. 5,000 per project, may be allotted. The recommendation of the Commissioner has, in the main, already been complied with—*vide* Government Resolution No. 31 A.I.—293, dated 16th February 1893. A discretionary grant of Rs. 28,000 has been provided in the Irrigation Minor Works Budget for 1893-94, and the Superintending Engineer has been invested with power to sanction new works, or additions, to the extent of Rs. 4,000 for each work, subject to the approval of the Commissioner in Sind. It has, however, not been found possible to allot a grant for the Major Works, nor is there any near prospect of the allotment being provided. The Government of India have very recently commented upon the growing expenditure under 42, Major Working Expenses, and especially on works of extensions and improvements, and it is improbable that they will grant additional funds under this head, to enable this Government to allot the discretionary grant asked for.

28. The expenditure on repairs, as compared with the previous two years and with the normal estimate of requirements, was as follows :—

	Major Works.	MINOR WORKS.		Total.
		Canals.	Bunds.	
		Rs.	Rs.	
Outlay in 1891-92	1,31,919	7,04,870	1,51,391	9,88,180
" 1890-91	1,29,954	7,26,755	1,20,606	9,77,315
" 1889-90	1,52,102	7,12,810	1,00,605	9,65,517
Normal estimate	1,31,000	6,46,000	1,23,000	9,00,000

The total outlay was larger than in any previous year except 1887-88. The outlay on canals was largest in the year 1889-90, being Rs. 8,64,912, and that on bunds largest in 1887-88, *viz.*, Rs. 1,82,743. As compared with last year the outlay on canals under Minor Works shows a decrease of Rs. 21,855. The outlay on bunds exceeded that of the previous year by Rs. 30,785. This increase is attributed to the damage done to the embankments in the Karáchi Canals District. This outlay is also said to include a sum of Rs. 10,596 expended on the construction of loop bunds, not usually debited to the maintenance grant. The Commissioner observes that small works may occasionally be done out of this grant, but the precedent is a dangerous one. Paragraph 83 B of Chapter VII of the Public Works Code classifies the construction of retired lines of bunds under ordinary maintenance.

The subject, however, was specially treated in paragraphs 97—102 of the Sind Irrigation Committee's report, and their recommendation about the classification of such works as extensions and improvements or special repairs has been approved by Government in paragraph 19 of Government Resolution No. 145 W.I.—1668, dated 20th October 1892. It is hoped that the provision of a discretionary grant will in future obviate, in some measure, the necessity of meeting the outlay referred to from the ordinary maintenance grant.

The total expenditure on repairs includes Rs. 1,87,201 on account of establishment charged to works, which exceeds the corresponding charge for the previous year by Rs. 11,100. The Superintending Engineer explains that this excess is not due to increase of establishment, but to an attempt at more correct classification of expenditure. This subject also has been dealt with by the Sind Irrigation Committee, but Government have not yet been in a position to pass final orders in the matter. The Superintending Engineer's further report, called for in paragraph 19 of Government Resolution No. 145 W.I.—1668, dated 20th October 1892, is still awaited.

29. The subject of embankments in Lower Sind has been separately reviewed in Government Resolution No. 156 W.I.—1800, dated 15th November 1892.

30. The establishment charges are discussed in paragraph 27 of the Superintending Engineer's report. As in the previous year, the totals therein given do not correspond with those of Table IV and the statement in paragraph 25 above. The figures of 'outlay' also differ, the deficiency being Rs. 8. It is explained in the foot-notes to Table IV that the expenditure on repairs shown there includes Rs. 8 on account of certain compensation, while the establishment charges exclude Rs. 2,861 and Rs. 2,261, or Rs. 5,122 in all, on account of collecting establishment in Khelât. The figures given in the statement in paragraph 25 show that there has been an increase under establishment, during the year under report, of Rs. 7,752. The causes of increase have been explained by the Superintending Engineer.

Financial results.

31. The following table recapitulates the financial results of the year :—

	Gross Revenue.	Working Expenses.	Percentage.	Net Revenue.	Percentage.
	Rs.	Rs.		Rs.	
Major Works	7,66,137	3,44,564	45	4,21,573	15
Minor Works—					
Works for which Capital and Revenue Accounts are kept ...	17,31,141	5,49,107	32	11,82,034	42
Works for which only Revenue Accounts are kept	21,73,558	9,74,554	45	11,99,004	43
	46,70,836	18,68,225	40	28,02,611	100
Agricultural Works... ..	7,039	1,54,348	...	-1,47,309	...
Total, 1891-92	46,77,875	20,22,573	43	26,55,302	...
1890-91	46,99,762	20,87,846	44	26,11,961	...
Increase	...	...	...	43,386	...
Decrease	21,867	65,273	...	...	...

The Major Works show a very great decrease in net revenue, chiefly owing to the unfavourable working of the Desert Canal. The Minor Works, and especially those for which only Revenue Accounts are kept, show satisfactory improvement.

32. The financial results of the capital account works for the year were as follows:—

	During the year.	To the end of the year.
	Rs.	Rs.
<i>Major Works.</i>		
Capital outlay	91,506	86,80,253
Gross revenue (realizations)...	7,66,137	.....
Deduct—Previous net revenue	28,300	.....
Gross revenue due to capital outlay	7,37,837	1,39,39,168
Revenue charges	3,44,564	60,00,427
Net Revenue ...	3,93,273	79,88,741
Simple Interest ...	3,33,985	60,60,979
Net profit after paying interest ...	59,288	18,77,762
<i>Minor Works.</i>		
Capital outlay... ..	44,254	33,94,787
Gross revenue (realizations)	17,31,132	.....
Deduct—Previous net revenue	3,74,707	.....
Gross revenue due to capital outlay	*13,56,425	2,37,76,913
Revenue charges	5,49,107	1,09,04,478
Net revenue ...	8,07,318	1,28,72,435
<i>Total Major and Minor Works.</i>		
Capital outlay... ..	1,35,760	1,20,75,040
Net revenue after deducting working expenses	12,00,591	2,08,11,176

* Includes Rs. 9 on account of Fuleli incorrectly credited to Karáchi Canals.

33. Taken altogether the net revenue realized amounted to Rs. 12,00,591, or 10·05 per cent., on the gross capital outlay to the end of the previous year (Rs. 1,19,39,280). The percentage in the previous year was 11·87, and the falling off is due to considerable decrease in net revenue under Major Works. The profit from the Major Works after paying interest was Rs. 59,288 only as compared with Rs. 2,86,098 in the previous year and Rs. 3,99,215 in 1889-90, the decline being chiefly due to the unfavourable working of the Desert Canal, already alluded to.

34. The net revenue from Minor Works was Rs. 8,07,318 as compared with Rs. 7,88,345 in the previous year and Rs. 7,30,470 in 1889-90, which shows a very satisfactory improvement. The question of average revenue before improvement of the Mehrabwah is under enquiry and investigation.

35. In reviewing the report for 1890-91 the Government of India in paragraph 24 of their Resolution No. 197 I, dated 16th August 1892, invited attention to the fact that the statements prescribed in Resolution No. 166 I of 11th July 1885 were not fully furnished. In reply it was represented by this Government that the statistical statement referred to were invariably furnished with the revenue reports of irrigation works in the Deccan and Gujarát; that the circumstances of works in Sind differed from those in the Deccan and Gujarát; and for this reason hope was expressed that the Government of India might see their way to dispensing with the submission of Statements I-A, I-E, II-E, IV-E and I-F, with the Sind revenue reports. The Government of India,

however, explained that the figures in these statements are required only for those works for which capital and revenue accounts are kept, and not for the numerous small canals, and that Statements IV-E and I-F may be dispensed with as regards Sind. Statements I—III-E have accordingly been prepared and submitted with the report for the first time. The Superintending Engineer was unable to complete Statement I-A in time for submission with this report. In paragraph 14 of their review of the last report, the Government of India observed that it is desirable that the figures in the several statements should be classified according to the financial heads of accounts. These orders have been followed in the report under review. The Superintending Engineer has also made some alterations in the form and number of the statements appearing in the body of the report, with a view to giving additional information. But, in this connection, the Superintending Engineer's attention should be drawn to the foot-note to paragraph 4 of the Commissioner's forwarding memorandum, in which he alludes to the trouble caused by constant changes. Government fully appreciate the desire of the Superintending Engineer to increase the utility of the statistical information compiled by him, but they would at the same time impress upon him the desirability of preserving uniformity.

36. In this report, Statement I-E takes the place of Table VIII in previous reports. From this it appears that the duty of water varied from 25·93 acres on the Thar Canal to 58·33 on the Surfraz Canal. The following gives a comparison with the figures for the previous year on some of the principal canals :—

				Area irrigated per cubic foot per second.	
				1890-91.	1891-92.
Desert Canal	...	...	...	54·20	49·41
Begári	..	...	...	47·03	53·36
Sukkur	..	...	...	33·98	32·41
Ghár	..	...	...	32·17	35·85
Mithráu	..	...	...	34·37	31·53
Fuleli	..	...	...	32·76	44·66

The Begári and the Fuleli canals show considerable improvement. The average discharges from which this information was deduced were—

				1890-91.	1891-92.
Desert Canal	...	...	...	2,118	1,217
Begári	..	...	...	3,146	3,214
Sukkur	..	...	...	1,756	1,682
Ghár	..	...	...	5,817	6,677
Mithráu	..	...	...	2,650	2,800
Fuleli	..	...	...	8,737	7,276

37. Statement II-E shows the incidence of working expenses on gross revenue. The percentage in the case of Total Major Works is 44·38 and in the case of Minor Works is 42·07. The percentage in the case of the Fuleli is incorrect, as observed¹ by the Commissioner.

38. Statement III-E shows the area and approximate value of each kind of crop. As observed by the Commissioner, this return will be more interesting when the figures are given for canals instead of for revenue districts.

39. In the year under report, a Committee assembled at Hyderabad to consider and report on the questions affecting the extension and improvement of the means of irrigation in Sind. The report has received the consideration of this Government and the Government of India, and effect is being gradually given to the proposals of the Committee which have been generally approved. The survey and revision of the plans and estimates for the Jamráo Canal have been already commenced: plans and estimates for the deepening of the Nára supply channel have been called for: the major part of the recommendations regarding Eastern Nára Works has been already sanctioned: the extension of the Unharwáb has been approved: improvement of the Fuleli Canal is receiving attention: surveys for the improvement of the Nasrat, Naolakhí and Mehrab and Dad canals, in the Hyderabad District, are in progress: in fact, every endeavour is being made commensurate with the establishment and funds available to improve the means of irrigation. The Shikárpur Canal is the only project of

¹ 1892.

importance which has been recommended by the Committee, but it has remained in abeyance. A project for this canal was prepared by the Superintending Engineer; it has, however, been returned to that officer, who desires to alter and re-submit it together with a project for the enlargement of the Sukkur Canal. The Commissioner in Sind, however, feels some apprehension as to the proposal to enlarge the Sukkur Canal. The whole question will be fully considered on receipt of the projects promised by the Superintending Engineer.

The proposals of the Committee regarding the re-survey of the Indus and survey of the Rohri and Bhawalpur floods have already been given effect to, and the question of survey of the mouths of the Indus has been referred to the Government of India in connection with the subject of rise of water level in Lower Sind. Their proposals as regards division of Sind into two circles and the formation of the Indus division are under the consideration of the Government of India.

40. The Superintending Engineer, Mr. Thompson, to whose unrivalled knowledge of Sind, its system of canals, and the respective needs of its various localities the Commissioner bears witness, has written an exhaustive and interesting report. His Excellency in Council is happy to acknowledge the credit that is due to him and to the officers of both Revenue and Public Works Departments for their able administration during the year under report.

41. Copies of the report and of this review should, as usual, be forwarded to the Government of India and the Secretary of State.

C. T. BURKE,
Under Secretary to Government.

To

The Revenue Department, Secretariat,
The Political Department, Secretariat,
The Commissioner in Sind,
The Survey and Settlement Commissioner,
The Superintendent, Sind Revenue Survey,
The Chief Engineer, C. D.,
The Superintending Engineer, N. D.,
The Superintending Engineer, S. D.,
The Superintending Engineer in Sind,
The Director of Land Records and Agriculture,
The Examiner of Public Works Accounts,
The Editor's Table,

} With copies of report.

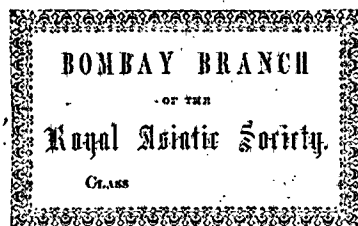
The Government of India, }
The Secretary of State for India. } By letter.

ANNUAL IRRIGATION REVENUE REPORT,

SIND,

1892-93.

[Price—Rs. 1-2-0.]



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1892-93.



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ANNUAL REVENUE REPORT

OF THE

PUBLIC WORKS DEPARTMENT, IRRIGATION, IN SIND, 1892-93.

The inundation of 1892 was peculiar; throughout the months of June and July the gauges at Bukkur and Kotri registered much below mean height, while in August and September they read considerably higher. There is a marked similarity between the curves of the inundations of 1887 and 1892, and where they separate the divergence is in favour of the former year. The inundation of 1887 was described as "very poor, somewhat irregular and deficient," and were its curve only taken into account, that of 1892 could not be classed higher. Looking, however, at the results attained, which cannot well be ignored, the season under review must be styled good. During May the rise was unsteady and the river after reading 8' 6" at Bukkur on 1st June fell uniformly throughout that month to 6' 6" on 1st July, being the lowest reading on record at that date. From 1st July the rise of level was fairly constant till its maximum 16' 9" was reached on 18th August, on the same date as in 1887, in which year the maximum was only 2" lower. The fall commenced at once, and with a slight interruption about the 1st September continued quick at Bukkur, but more prolonged at Kotri, where the highest reading yet recorded was reached on 27th August. The inundation was very unfavourable for the kharif crop, which requires water in June and July, and especially so for cotton and rice, but the high level in August maintained well into September gave an excellent supply for rabi.

In comparing this inundation with that of 1887 the rise of water level in the Delta district, and the great increase in the time which the flood of 1892 took to escape to the sea is very remarkable. As far as any conclusion can be drawn from the readings of Bukkur gauge, the volume of water passing it was almost the same in each year. In 1887 the Bukkur gauge read 16' and over for 11 days, and in 1892 for 12, while the maximum reading of 1892 was only 2" over that of 1887 and occurred on the same date. In 1887 the Kotri gauge registered 19' and over for 12 days, and in 1892 for 34, with a maximum reading 1' 8" above that of 1887.

In other words the Indus took nearly 3 times as long in 1892 to discharge a flood of nearly the same volume as in 1887 and with an increase in level of 21". This is not the place to discuss the probable causes of this fact, but it is worth noting, and it may be added that since 1887 there has been no extension of embankment in Upper Sind, and though some 50 miles extra are now shown in the Karachi District, the addition is due more to corrections of measurement than to extension of embankments.

In a perfect inundation the curve of the Indus should read over 13' at Bukkur and over 17' at Kotri for about 10 weeks from 25th June, and the following figures are interesting as showing how far the last 4 inundations have fulfilled this test:—

Years.	Bukkur, number of days over 13'.	Kotri, over 17'.	CULTIVATION.		
			Kharif.	Rabi.	Total.
			Acres.	Acres.	Acres.
1889	76	66	1,936,630	413,189	2,349,819
1890	37	37	1,800,280	403,193	2,203,473
1891	30	45	1,690,821	474,810	2,165,631
1892	38	41	1,822,845	576,210	2,399,055

The river in 1889 was almost perfect and would have been quite so had the maximum rise been reached a week later. There is a marked falling off in the supply of water in the next 3 years, but the results may be fairly taken as showing that Sind irrigation is gradually coming to be less dependent on the character of the inundation.

The rainfall throughout the Province was unusually heavy. In the Western Nára district it caused heavy floods doing great damage to cultivation and canal banks, and also in some portion of the Karáchi district. In other places it was beneficial; the heaviest fall coming in end of July and beginning of August greatly helped the cultivators in getting in the kharif crop, the time for which had almost passed. The abundant supply of grass that springs up after rain is also of use in providing food for the cattle engaged in cultivation. In 1887 also the kharif crop was much helped by seasonable rain, which, lasting well into the cold weather, "brought to maturity a bumper rabi crop."

2. In the Begári district a breach occurred in the Káshmor Bund in August, but the flood covered only a small area and did little harm.

The Rohri district was swept by local floods joined later on by a moderate flood from Bháwalpur. The united waters entered the Nára Supply Channel causing a flood in the Nára valley, which, although it breached some of the canal bunds, did not last long and was disposed of with little damage to cultivation or works.

The Shikárpur and Ghár districts escaped, the bunds protecting them remaining staunch. The Western Nára district suffered severely. The line of river embankment was breached in several places, and rain floods from the hills on the west inundated the whole country up to the Nára from a little below Mehar to the hills which bound the district on the south. There was a slight spill in the north of Hyderabad district, but of no consequence. In the Fuleli district the city of Hyderabad was completely cut off from the river by a flood which for the first time overflowed the river bank south of the Fuleli; it did no harm to cultivation, but damaged considerably some public buildings, roads and the Unarkot Railway. In the Karáchi district where the usual height of the river was further increased by a large influx of rain water from the Baran, a channel which drains the greater part of Káshistán, the river embankments were breached and overtopped in many places, and almost all Sháhbandar was under water; also a large area of the Jharik sub-division was flooded from the river and from rain from the western highlands. In the Western Nára and Karáchi Canal districts, the cultivation suffered much and the remissions are heavy, but in the Western Nára the loss to Government will be more than recouped by the excellent Bawal crops grown on land under the hills depending entirely on rain water.

3. Almost all the large canals flowed in good time, but water was not available in the great majority of the branches till it was almost too late for kharif sowings. The long continued low level of the river was, however, better in some ways than a series of fluctuations; cultivators were able to devote their whole attention to preparations for the rise, and when it came the distributing channels were clear of silt and able to carry the water quickly to the fields. With some few and unimportant exceptions all canals are reported to have worked well, and to have distributed the supply available without any serious complaints. The new month of the Desert Canal worked well throughout the season though somewhat damaged and silted by the passage of rain floods across it. Erosion still continued at the mouth of the Pritchard Canal, and fears are now entertained for the safety of the head regulator. As in the previous year this canal was closed for the greater part of the season. The supply in the Western Nára was overflowing, and late in the season the canal greatly benefited by the discharge of flood water through it, which being clear removed much silt, thereby improving the bed gradient. The new feeder was opened for the first time for a few days, but almost immediately closed again. The river remained at a fair irrigating height some days longer than usual, thereby increasing the value of the kharif crops, which though very late had been quickly sown with the help of seasonable rain. The cultivation in many places was damaged by locusts, and a bad visitation of cholera had a disheartening effect throughout the Province.

In the Begári, Shikárpur and Ghár districts the river embankments are in good order and of sufficient section, but the ground in many places is liable to gape after long drought, which adds to the danger of leaks underneath the embankments where the borrow pits are too close. In the Western Nára the embankments are very old, and as it is only within the last 2 years that they have been subjected to any water pressure, not much has as yet been done towards bringing them up to required strength. In Karáchi the greatest danger

to the embankments is from the large number of water courses which pass through them. The earthwork of these embankments has been yearly increased, and keeps fairly up to the increase of water level, but the sluices are more difficult to deal with and a final settlement as to their number and construction is greatly to be desired.

4. The clearance grant was expended as usual, the only special work being the thorough clearance of the Imamwah Janobi in the Fuleh district, so as to get full benefit from the removal of two bends, which was completed before the inundation. The improvement and extension of the Unharwah were commenced, and the new feeder for the Western Nára in Labdária was completed, as far as is possible until the Dhamrao Canal, on which work was started, is finished. In the Eastern Nára the clearance between Jatri and Ketí was completed, and a cut 50 feet wide made across a bend which obstructed the free flow and passage of silty water. In the Fuleh district the regulator on the old mouth was completed and another commenced at the 60th mile of the main channel. A short bund was constructed to stop the spill south of the new mouth at Jamshora. The field work required in connection with the revision of the plans of the Jamrao Canal and Nára supply channel was completed, as also was that for works proposed to regulate the floods in the Rohri district.

5. The following statement gives the assessed area of cultivation on Government land for the year and 5 preceding years:—

STATEMENT A (*vide* TABLE VII.)

Years,			Major.	Minor.				Grand Total.	
			Capital.	Capital.	Revenue.	Agricultural.	Total.		
			1	2	3	4	5		6
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1887-88	...	...	{ Kharif ...	323,232	469,157	644,632	1,195	1,114,984	1,438,216
			{ Rabi ...	50,963	57,237	104,753	2,753	164,748	215,411
			Total ...	373,895	526,394	749,385	3,953	1,279,732	1,653,627
1888-89	...	...	{ Kharif ...	411,939	527,525	707,779	1,343	1,236,647	1,648,596
			{ Rabi ...	77,372	74,445	84,816	2,337	161,598	238,970
			Total ...	489,311	601,970	792,595	3,680	1,398,245	1,887,566
1889-90	...	...	{ Kharif ...	418,047	553,750	745,646	2,597	1,303,993	1,722,040
			{ Rabi ...	121,756	118,178	145,964	2,766	266,008	387,764
			Total ...	539,803	671,928	890,710	5,363	1,570,001	2,109,804
1890-91	...	...	{ Kharif ...	353,289	556,792	685,523	1,330	1,243,650	1,596,939
			{ Rabi ...	90,679	124,994	139,316	3,229	267,539	358,218
			Total ...	443,968	681,786	824,844	4,559	1,511,189	1,955,157
1891-92	...	...	{ Kharif ...	291,102	544,178	677,437	816	1,222,431	1,513,535
			{ Rabi ...	111,339	136,751	185,193	2,901	324,845	436,184
			Total ...	402,441	680,929	862,630	3,717	1,547,276	1,949,717
Average	...	...	{ Kharif ...	359,522	530,681	692,204	1,456	1,234,341	1,583,863
			{ Rabi ...	90,362	102,321	131,829	2,798	236,948	327,310
			Total ...	449,884	633,002	824,033	4,254	1,461,289	1,911,173
1892-93	...	...	{ Kharif ...	376,124	560,399	695,689	829	1,256,917	1,633,041
			{ Rabi ...	103,862	143,076	235,716	2,265	431,056	534,918
			Total ...	479,986	703,474	931,405	3,094	1,687,973	2,167,959
Increase or decrease	...	...	{ Kharif ...	+16,602	+29,718	+3,485	-627	+32,476	+49,173
			{ Rabi ...	+13,500	+40,754	+153,887	-533	+194,108	+207,608
			Total ...	+30,102	+70,472	+157,372	-1,160	+226,584	+256,781

The area of assessed cultivation on Government land amounted to 2,167,959 acres, of which 1,633,041 were under kharif and 534,918 under rabi crops. The total exceeds the average by 256,786 acres, and that of the previous year by 218,242 and is the highest yet reached, exceeding that of 1889-90 by 58,155 acres. Separating the figures for kharif and rabi we find an increase in the former of 119,508 and 49,178 and in the latter of 98,734 and 207,608 over the figures of 1891-92 and of the average. The very large increase of kharif cultivation, compared with that of 1891-92, is due chiefly to the failure of the crop on the Desert Canal in that year, and the remarkable increase in rabi is accounted for by the lateness of the rise which restricted kharif operations, leaving much land prepared for kharif unsown and available for the later crop.

The area irrigated by Major Works amounted to 479,986 acres, exceeding the average by 30,102 and that of the previous year by 77,545 acres. The kharif crop shows a large increase, and the rabi a small decrease when compared with those of 1891-92, due to the failure of the former and consequent increase of the latter crop in that year.

Under Minor Works, those for which capital accounts are kept show good returns, the area irrigated being 70,472 acres above the average and exceeding that of previous year by 22,545 acres. The increase is fairly divided between both crops, about half is due to the Ghár Canal and the remainder in almost equal proportions to the Marak, Sarfráz and Fuleli.

On canals coming under the head "Revenue" the area of kharif was well maintained, being 3,485 acres in excess of the average, while that of the rabi crop shows the large increase of 153,887 acres over the average and of 100,523, above that of the previous year. Most of the canals coming under this head are small, and a large number of them did not get any water till late in the season, when it was almost too late for kharif, but the supply when it came was good and fully utilised, giving the largest rabi crop on record.

The area of cultivation due to Agricultural works is small and unimportant and amounted to 3,094 acres, being 1,160 below the average.

The most remarkable and satisfactory features of this statement are the steady maintenance of the area of kharif cultivation in an inundation peculiarly unfavourable to that crop, and the enormous increase of rabi on all the smaller canals.

6. The following statement shows the area irrigated in Jágghir land in British territory :—

STATEMENT A.—1 (*vide* TABLE III. A.)

		Major.	Minor.				Grand Total
			Capital.	Revenue.	Agricultural.	Total.	
			1	2	3	4	
			Acres.	Acres.	Acres.	Acres.	
1887-88	{ Kharif ...	7,621	69,757	61,440	33	130,230	137,851
	{ Rabi ...	970	4,674	10,126	13	14,813	15,783
	Total ...	8,591	73,431	71,566	46	145,043	163,634
1888-89	{ Kharif ...	8,564	69,565	61,574	.....	131,139	139,703
	{ Rabi ...	1,574	4,664	8,804	38	13,506	15,080
	Total ...	10,138	74,229	70,378	38	144,615	154,783
1889-90	{ Kharif ...	8,120	72,563	66,654	.....	139,217	147,337
	{ Rabi ...	2,244	5,077	5,413	.....	10,490	12,734
	Total ...	10,364	77,640	72,067	.....	149,707	160,071
1890-91	{ Kharif ...	6,787	72,079	62,509	.....	134,588	141,375
	{ Rabi ...	3,455	18,998	20,744	.....	39,742	43,197
	Total ...	10,242	91,077	83,253	.....	174,330	184,572

			MAJOR.		Minor.			Grand Total.
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
1			2	3	4	5	6	
Acres.			Acres.	Acres.	Acres.	Acres.	Acres.	
1891-92	{	Kharif	6,775	69,853	60,769	.....	130,622	137,397
		Rabi	6,145	8,289	13,361	.....	21,650	27,785
	Total		12,920	78,142	74,130	.....	152,272	165,192
Average	{	Kharif	7,573	70,563	62,589	7	133,159	140,732
		Rabi	2,878	8,341	11,689	10	20,040	22,918
	Total		10,451	78,904	74,278	17	153,199	163,660
1892-93	{	Kharif	8,994	71,118	55,682	.....	126,800	135,794
		Rabi	1,875	12,472	17,441	.....	29,913	31,788
	Total		10,869	83,590	73,123	.....	156,713	167,582
Increase or Decrease	{	Kharif	+ 1,421	+ 555	- 6,907	- 7	- 6,359	- 4,938
		Rabi	- 1,003	+ 4,131	+ 5,752	- 10	+ 9,873	+ 8,870
	Total		+ 418	+ 4,686	- 1,155	- 17	+ 3,514	+ 3,932

The total area irrigated in Jágghir land amounted to 167,582 acres, of which 135,794 were sown with kharif and 31,788 acres with rabi crops. Compared with the average the figures show a decrease in kharif of 4,938 acres and an increase of 8,870 acres of rabi. The decrease is entirely due to the late supply in the smaller canals coming under the head Minor (Revenue). There is a large decrease in the rabi crop under Major Works which is apparently accounted for by more accurate distinction between canal and spill water cultivation. During the year a Jágghir of 1,000 acres on the Desert Canal reverted to Government, and a new one of like area was granted on the Eastern Nára.

In the Hyderabad and Fuleli districts 19 Jágghirs of an aggregate area of 2,750 acres lapsed and came under Government control.

7. In the following statement is shown the area of cultivation irrigated on Government canals in Foreign territory :—

STATEMENT A—2 (*vide* TABLE III. A).

				MAJOR.		MINOR.				Grand Total
				Capital.	Capital.	Revenue.	Agricultural.	Total.		
1				2	3	4	5	6		
Acres.									Acres.	
1887-88...	{	Kharif	60,998	...	...	.....	...	60,998		
		Rabi	2,855	...	...	.....	...	2,855		
	Total		63,853	...	...	.....	...	63,853		
1888-89	{	Kharif	66,141	.....	...	.....	...	66,141		
		Rabi	10,155	...	...	.....	...	10,155		
	Total		76,296	...	...	.....	...	76,296		
1889-90	{	Kharif	67,253	...	...	.....	...	67,253		
		Rabi	12,691	...	...	.....	...	12,691		
	Total		79,944	...	...	.....	...	79,944		
1890-91	{	Kharif	61,966	...	...	.....	...	61,966		
		Rabi	1,778	...	...	.....	...	1,778		
	Total		63,744	...	...	.....	...	63,744		

			MAJOR.		MINOR.				Grand Total.
			Capital.		Capital.	Revenue.	Agricultural.	Total.	
			1	2	3	4	5	6	
			Acres.						
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1891-92	...	{ Kharif	39,891	...	...	...	...	...	39,891
		{ Rabi	10,831	...	...	...	...	...	10,831
		Total	50,722	...	...	...	...	...	50,722
Average	...	{ Kharif	50,250	...	...	...	...	...	50,250
		{ Rabi	7,662	...	...	...	...	...	7,662
		Total	66,912	...	...	...	...	...	66,912
1892-93	...	{ Kharif	54,010	...	...	...	...	...	54,010
		{ Rabi	9,504	...	...	...	...	...	9,504
		Total	63,514	...	...	...	...	...	63,514
Increase or Decrease	...	{ Kharif	-5,240	...	...	...	...	...	-5,240
		{ Rabi	+1,842	...	...	...	...	...	+1,842
		Total	-3,398	...	...	...	...	...	-3,398

The figures in this statement show the cultivation in Kelât watered by the Desert and Begâri Canals. The area cultivated was less than the average by 3,398 acres, but exceeded that of the previous year by 12,792 acres owing to a better supply in the Desert Canal.

8. The following statement shows collectively the cultivation on Government Jâghir and Foreign land :—

STATEMENT A—3 (*vide* TABLE III. A. AND VII).

			MAJOR.		MINOR.			Grand Total.
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
1	2	3	4	5	6			
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1887-88	...	{ Kharif	391,251	537,914	706,072	1,228	1,245,214	1,637,065
		{ Rabi	54,488	61,911	114,879	2,771	179,561	234,049
		Total	446,339	599,825	820,951	3,999	1,424,775	1,871,114
1888-89	...	{ Kharif	486,644	597,080	769,353	1,343	1,367,786	1,854,430
		{ Rabi	89,101	79,109	93,620	2,375	175,104	264,205
		Total	575,745	676,199	862,973	3,718	1,542,890	2,110,635
1889-90	...	{ Kharif	493,420	628,313	812,300	2,597	1,443,210	1,996,630
		{ Rabi	136,091	123,255	150,477	2,766	276,498	413,189
		Total	630,111	751,568	962,777	5,363	1,719,708	2,349,819
1890-91	...	{ Kharif	422,042	628,871	748,037	1,330	1,373,236	1,800,280
		{ Rabi	95,912	143,992	160,060	3,229	307,281	403,193
		Total	517,954	772,863	908,097	4,559	1,680,519	2,203,473
1891-92	...	{ Kharif	337,768	614,031	738,206	816	1,353,053	1,690,821
		{ Rabi	128,315	146,040	193,554	2,901	146,495	474,810
		Total	466,083	759,071	931,760	3,717	1,499,548	2,165,631
Average	...	{ Kharif	426,345	601,244	754,793	1,463	1,357,500	1,783,845
		{ Rabi	100,901	110,662	143,518	2,808	256,988	357,889
		Total	527,246	711,906	898,311	4,271	1,614,488	2,141,734
1892-93	...	{ Kharif	430,128	631,517	751,371	829	1,383,717	1,832,845
		{ Rabi	116,241	155,547	203,157	2,265	460,969	576,210
		Total	546,369	787,064	1,054,528	3,094	1,844,686	2,399,055
Increase or Decrease	or De-	{ Kharif	+12,783	+30,273	-3,422	-634	+26,217	+38,999
		{ Rabi	+14,340	+44,885	+159,639	-513	+203,581	+218,322
		Total	+27,123	+75,158	+156,217	-1,177	+230,198	+257,321

The area irrigated in 1892-93 amounted to 2,399,055 acres, made up by 1,822,845 acres of kharif and 576,210 acres of rabi cultivation. The figures have been explained in detail in the remarks under previous statements, but collectively they show some notable results. Their total is the largest yet recorded for Sind, exceeding the average by 257,321 and that of the previous year by 233,424, and that of 1887-88, a year of similar inundation, by 527,941 acres. The kharif crop shows a fair increase of 33,999 over the average, and it exceeds that of the previous year by 132,024 acres, but it falls short of 1889-90 by 113,785 acres. The inundation of 1889 was the most favourable for kharif we have ever had, while that of 1892 was poor, and, if anything, worse than in 1887, yet it produced a crop larger by 185,780 acres. The rabi crop is the largest on record, exceeding the average by 218,322 and that of 1891-92, the next best year, by 101,400 acres, while it is more than double the crop of 1887. The increase in kharif cultivation is due to Major and Minor capital works, there being a slight decrease from the canals under Minor Revenue. The increase in rabi is apparent on all canals, but is especially marked under the head Minor Revenue. These results are accounted for by the continued low level of the river in the early part of the season, which compelled much land prepared for kharif to be sown with rabi, as water was not available in time for the former crop, and more especially was this the case on all the smaller canals, many of which practically received no kharif supply at all. The work done by canals classed as Minor Capital was very good; under this head we got the largest kharif crop ever grown, a remarkable result in this inundation, partly due to small improvements in the Hyderabad Canals, and to the free use made of the old head of the Sukkur Canal during June and July.

The kharif crop under Minor Revenue Canals does not compare so favourably with that of the best of former years, but it was very good for these canals, for which the heavy rain that fell just in time was a great help. It is under the head Major Capital that the kharif shows the worst return, and the canal most accountable for this is the Desert, which had not quite recovered its old form and was also somewhat damaged in the end of the season by rain floods. The rabi crop also might have been better on the Major canals in Upper Sind, and it is difficult to say why these canals do not show better results if it is not in a measure due to the exodus of cultivators in the previous year and to the prevalence of disease and locusts. Under all Minor Works the rabi crop was excellent and under Revenue extraordinary. The figures for rabi cultivation in this report do not include that from spill other than from canals.

9. The following statement gives the same information as the preceding one, but the figures are given in detail for each Canal District:—

STATEMENT A—4 (*vide* TABLES III—A AND VII.)

Districts.	MAJOR.	MINOR.				Grand Total, 1892-93.	Total, 1891-92.	Average five years.	Compared with 1891-92.	Compared with average.
	Capital.	Capital.	Revenue.	Agricultural.	Total.					
1	2	3	4	5	6	7	8	9	10	11
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begari Canals Dis- (Kharif ...	254,145	...	...	829	829	254,974	193,899	273,490	+61,075	-18,506
tract ... (Rabi ...	96,812	...	...	2,265	2,265	89,077	63,560	85,299	+4,873	+23,577
Total ...	310,957	...	...	3,094	3,094	314,051	257,459	368,690	+56,202	+5,371
Shikarpur Canals Dis- (Kharif ...	...	...	121,265	...	121,265	121,265	90,068	168,862	+31,207	+14,373
tract ... (Rabi ...	...	...	76,391	...	76,391	76,391	55,451	83,493	+22,940	+44,308
Total ...	...	...	199,656	...	199,656	199,656	145,509	252,355	+54,147	+59,291
Ghar Canals Dis- (Kharif ...	...	247,423	...	...	247,423	247,423	235,468	237,849	+11,955	+9,554
tract ... (Rabi ...	...	96,888	...	...	96,888	96,888	93,244	98,061	+3,844	+8,857
Total ...	...	344,311	...	...	344,311	344,311	328,712	335,900	+15,589	+38,411
Western Nara Dis- (Kharif ...	...	...	172,245	...	172,245	172,245	174,323	175,622	-2,078	-3,317
tract ... (Rabi ...	...	...	146,780	...	146,780	146,780	89,345	63,125	+57,435	+83,655
Total ...	...	...	319,025	...	319,025	319,025	263,668	238,747	+55,357	+80,275

Districts.	Major.	Minor.				Grand	Total.	Average	Compared	Compared
	Capital.	Capital.	Revenue.	Agricultural.	Total.	Total, 1892-93.	1891-92.	five years.	with 1891-92.	with average.
1	2	3	4	5	6	7	8	9	10	11
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Eastern Nára Dis- trict ... { Kharif ...	184,983	...	...	...	...	184,983	141,685	154,303	+40,208	+30,681
... { Rabi ...	56,429	...	...	...	...	56,429	67,366	68,484	-8,837	-10,085
Total ...	241,412	...	...	...	...	241,412	211,931	222,787	+31,461	+20,625
Hyderabad Canals District ... { Kharif ...	...	102,103	277,156	...	579,259	579,259	378,801	368,196	+438	+11,063
... { Rabi ...	...	8,676	44,469	...	53,145	53,145	31,809	27,258	+18,336	+25,867
Total ...	...	110,779	321,625	...	632,404	632,404	413,610	395,454	+18,794	+36,950
Fulhi Canals Dis- trict ... { Kharif ...	...	281,991	16,258	...	298,249	298,249	296,400	258,313	+1,750	+10,637
... { Rabi ...	...	49,983	3,232	...	53,215	53,215	49,273	42,610	+3,943	+10,605
Total ...	...	331,974	19,490	...	551,464	551,464	345,772	330,822	+5,692	+20,642
Karachi Canals Dis- trict, ... { Kharif ...	...	164,447	...	...	164,447	164,447	177,088	179,272	-12,641	-14,825
... { Rabi ...	...	30,285	...	...	30,285	30,285	21,472	19,697	+8,813	+10,589
Total ...	...	194,732	...	...	194,732	194,732	198,560	198,969	-3,226	-4,257
Total for Sind ... { Kharif ...	439,129	631,517	751,371	829	1,383,717	1,382,845	1,600,581	1,783,846	+1,32,024	+38,990
... { Rabi ...	115,211	165,547	308,157	2,365	460,969	476,310	474,810	337,888	+1,01,400	+2,18,322
Total ...	554,340	797,064	1,059,528	3,094	1,844,686	2,399,065	2,105,631	2,141,734	+2,33,424	+2,37,321

The remarks under previous statements explain the results here shown. In the Begari and Karachi districts the kharif crop was not so good, floods being accountable in the latter district as also in the Western Nára.

The Eastern Nára is the only district which shows a decrease in rabi, due chiefly to the extra supply given by flood water lasting a shorter time than in most years from which the average is struck, and to the exceptionally heavy rain which swamped land that would otherwise have been sown. In the other districts both crops were above the average.

10. In the preceding statement the area of dubári (twice cropped) cultivation is not included. In the following statement it is given for the five revenue districts:—

District.	Year.		Increase or Decrease.	REMARKS.
	1891-92.	1892-93.		
1	2	3	4	5
	Acres.	Acres.	Acres.	
Upper Sind Frontier ...	25,183	12,121	-13,062	
Shikárpur ...	1,65,795	1,66,783	+988	
Thar and Parkar ...	5,251	7,876	+2,625	
Hyderabad ...	7,979	12,152	+4,173	
Karachi ...	23,539	29,572	+6,033	
Total ...	2,19,768	*2,28,504	+8,736	

*NOTE—All the areas for 1892-93 have not been accounted for by the Revenue Department in the crop returns, hence only those communicated have been shown in that return.

The area of this crop shows a considerable increase due most probably to the high river at the end of the season which left sufficient water in the soil for a second crop, and to the late rain. The assessment on this crop, which is 4 annas per acre under irrigational settlement, is included in the consolidated assessment; under the old settlement no rate is levied for dubári. The total cultivation in the Province as given in Statement A (3) amounts to 2,399,055 acres, the area of dubári is 228,504, and there are 1,827 acres of unauthorized cultivation in Shikárpur which brings the year's area of cultivation to the satisfactory total of 2,629,386 acres.

11. The five preceding statements and the remarks on them treat only of cultivation; the following series similar in form and number deals with net consolidated assessment:—

STATEMENT B (*vide* TABLE VII).

		Major.	Minors.					Grand Total.
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	
1887-88	{	Kharif ...	6,76,085	12,51,305	16,65,935	2,412	29,19,855	35,95,740
	{	Rabi ...	89,990	1,44,698	2,97,710	5,513	4,47,921	5,37,911
		Total ...	7,66,075	13,96,003	19,63,648	7,925	33,67,576	41,33,651
1888-89	{	Kharif ...	8,66,829	14,07,512	18,40,579	2,746	32,50,837	41,17,666
	{	Rabi ...	1,36,217	1,98,114	2,38,489	4,730	4,41,333	5,77,550
		Total ...	10,03,046	16,05,626	20,79,068	7,476	36,92,170	46,95,216
1889-90	{	Kharif ...	8,71,271	14,44,821	18,39,234	5,240	32,89,295	41,60,566
	{	Rabi ...	2,04,259	3,24,636	3,97,970	5,820	7,28,426	9,32,685
		Total ...	10,75,530	17,69,457	22,37,204	11,060	40,17,721	50,93,251
1890-91	{	Kharif ...	7,69,518	15,18,111	18,22,379	2,651	33,43,141	41,12,659
	{	Rabi ...	1,77,137	3,42,806	3,91,763	6,546	7,41,115	9,18,252
		Total ...	9,46,655	18,60,917	22,14,142	9,197	40,84,256	50,30,911
1891-92	{	Kharif ...	5,84,476	14,94,764	18,00,837	1,480	32,97,101	38,81,577
	{	Rabi ...	2,36,995	3,77,692	5,43,184	5,301	9,26,177	11,63,172
		Total ...	8,21,471	18,72,456	23,44,041	6,781	42,23,278	50,44,749
Average	{	Kharif ...	7,53,636	14,23,302	17,93,797	2,960	32,20,005	39,73,641
	{	Rabi ...	1,68,920	2,77,589	3,73,823	5,582	6,56,994	8,25,914
		Total ...	9,22,556	17,00,891	21,67,620	8,488	38,76,999	47,99,555
1892-93	{	Kharif ...	8,02,255	15,10,923	16,74,837	1,624	31,87,384	39,89,639
	{	Rabi ...	2,22,174	4,01,229	8,35,684	4,605	12,41,519	14,63,693
		Total ...	10,24,429	19,12,152	25,10,521	6,230	44,28,903	54,53,332
Increase or decrease	{	Kharif ...	+48,619	+87,621	-1,18,960	-1,282	-32,621	+15,998
	{	Rabi ...	+53,254	+1,23,640	+4,61,861	-976	+5,84,325	+6,37,779
		Total ...	+1,01,873	+2,11,261	+3,42,901	-2,258	+5,51,904	+6,53,777

The net consolidated assessment on Government land for the year amounted to Rs. 34,53,332, exceeding the average by the large sum of Rs. 6,53,777 and that of the previous year by Rs. 4,08,583. Separating the figures for kharif and rabi they compare with those of the average and of previous year as follows :—

		1892-93.	Average.		1891-92.	
		Rs.	Rs.	Rs.	Rs.	Rs.
Kharif	...	39,89,639	39,73,641	+ 15,998	38,81,577	+ 1,08,062
Rabi	...	14,63,693	8,25,914	+ 6,37,779	11,63,172	+ 3,00,521
Total	...	54,53,332	47,99,555	+ 6,53,777	50,44,749	+ 4,08,583

The increase in kharif revenue is small, but it would have been considerable were it not for the remissions given in Karachi district on account of floods. The increase in the returns from rabi is very large owing to the peculiar character of the inundation. From Major Works the returns are good, showing a fair increase under both crops. Under the head Minor Capital there has been a large increase in both kharif and rabi revenue, the total being the largest yet recorded from those works. But it is from the rabi crop under Minor Revenue that more than half of the total increase of the year has been obtained. Under this head the revenue from kharif shows a considerable decline owing to

remissions on account of floods in Western Nára and Karáchi districts and to the greater sensitiveness of the smaller canals to the bad effects of a late river.

In paragraph 10 of his memorandum forwarding the Revenue Report of last year the Commissioner in Sind notices the Village Cess Fund, from which the village establishment employed to collect the revenue are paid. This fund is formed by a deduction of $\frac{1}{17}$ th of the assessment on cultivation and the balance only is shown as assessment from irrigation. This appears to have been overlooked when the Village Cess was first introduced in 1882, since which year it has not been included in canal revenue though actually a part of the assessment on cultivation. The net consolidated assessment therefore shown in this report is $\frac{16}{17}$ ths of the actual assessments, which for the year on Government land should be Rs. 57,94,165, the village cess deduction in the returns amounting to Rs. 3,40,833.

The increase of assessment shown in this statement is not all due to canals; there was a change of settlement in some talukas which will be noticed in another paragraph to which a small share of the favourable results here recorded is due.

12. The following statement gives the net assessed revenue from jâghirs :—

STATEMENT B—1 (*vide* TABLE III A).

			Major.		Minor.			Grand Total.
			Capital.		Capital.	Revenue.	Agricultural.	
							Total.	
			1	2	3	4	5	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88	...	{ Kharif ...	3,624	22,468	22,003	16	45,087	48,711
		{ Rabi ...	311	1,309	3,793	7	5,169	5,490
		Total ...	3,935	23,837	26,396	23	50,256	54,191
1888-89	...	{ Kharif ...	4,063	29,761	22,908	...	52,589	56,652
		{ Rabi ...	602	1,237	2,537	11	3,805	4,407
		Total ...	4,665	31,018	25,365	11	56,394	61,059
1889-90	...	{ Kharif ...	3,862	30,608	24,540	...	55,148	59,010
		{ Rabi ...	878	1,075	1,794	...	2,869	3,747
		Total ...	4,740	31,683	26,334	...	58,017	62,757
1890-91	...	{ Kharif ...	3,197	41,116	12,224	...	53,340	56,537
		{ Rabi ...	1,328	5,127	6,305	...	11,432	12,760
		Total ...	4,525	46,243	18,529	...	64,772	69,297
1891-92	...	{ Kharif ...	3,343	28,432	22,819	...	51,251	54,594
		{ Rabi ...	2,428	3,208	6,583	...	9,791	12,219
		Total ...	5,771	31,640	29,402	...	61,042	66,813
Average	...	{ Kharif ...	3,618	30,481	20,999	3	51,483	55,101
		{ Rabi ...	1,109	2,403	4,206	4	6,613	7,722
		Total ...	4,727	32,884	25,205	7	58,096	62,823
1892-93	...	{ Kharif ...	4,283	29,334	21,471	...	50,805	55,088
		{ Rabi ...	700	4,498	5,788	...	10,286	11,046
		Total ...	5,043	33,832	27,259	...	61,091	66,134
Increase or Decrease.	{ Kharif ...		+ 665	—1,147	+ 472	—3	—678	—13
	{ Rabi ...		—349	+ 2,095	+ 1,582	—4	+ 3,673	+ 3,324
	Total ...		+ 316	+ 948	+ 2,054	—7	+ 2,995	+ 3,311

There has been little change in the area of jágghir cultivation since 1888-89 ; it oscillates about 65,000 acres. In the year under report there was a slight increase in the area under rabi, and the kharif crop was about the average.

The area of jágghir land is constantly decreasing owing to lapse of the lower class of jágghirs, from which in 1892-93, 3,750 acres reverted to Government, while one new jágghir of 1,000 acres was granted.

13. The following statement gives the net assessment on cultivation in Foreign Territory irrigated by Government canals :—

STATEMENT B—2 (*vide* TABLE III A).

		Major.	Minor.				Grand Total.
		Capital.	Capital.	Revenue.	Agricultural.	Total.	
		1	2	3	4	5	6
		Rs.					Rs.
1887-88	{ Kharif	59,766	.....	.....	...	.....	59,766
	{ Rabi	2,892	.....	.....	...	.....	2,892
	Total	62,658	.....	.....	...	.....	62,658
1888-89	{ Kharif	66,156	.....	.....	...	.....	66,156
	{ Rabi	10,239	.....	.....	...	.....	10,239
	Total	76,395	.....	.....	...	.....	76,395
1889-90	{ Kharif	65,743	.....	.....	...	.....	65,743
	{ Rabi	12,729	.....	.....	...	.....	12,729
	Total	78,472	.....	.....	...	.....	78,472
1890-91	{ Kharif	61,969	.....	.....	...	.....	61,969
	{ Rabi	1,778	.....	.....	...	.....	1,778
	Total	63,747	.....	.....	...	.....	63,747
1891-92	{ Kharif	29,859	.....	.....	...	.....	29,859
	{ Rabi	10,831	.....	.....	...	.....	10,831
	Total	40,690	.....	.....	...	.....	40,690
Average	{ Kharif	56,698	.....	.....	...	.....	56,698
	{ Rabi	7,694	.....	.....	...	.....	7,694
	Total	64,392	.....	.....	...	.....	64,392
1892-93	{ Kharif	33,653	.....	.....	...	.....	33,653
	{ Rabi	9,504	.....	.....	...	.....	9,504
	Total	43,157	.....	.....	...	.....	43,157
Increase or Decrease.	{ Kharif	-23,045	.....	.....	...	.....	-23,045
	{ Rabi	+1,810	.....	.....	...	.....	+1,810
	Total	-21,235	.....	.....	...	.....	-21,235

These figures refer to cultivation in Kelat on the Desert and Begári canals. The assessment amounted to Rs. 63,517, but remissions amounting to Rs. 20,360 were accounted for in the year, bringing the total down to Rs. 43,157. Of these remissions Rs. 14,312 were on account of failure of Desert Canal in previous year, and only Rs. 4,045 are due to inundation of 1892. Looking at the operations of this year the result is not so bad, though still Rs. 4,923 below the average. There is too much land available for cultivation on the Desert Canal in Kelat, and very little control over the supply taken ; the result is unfavourable to the working of the canal, and its bad effects will be felt more year by year until alleviating measures are undertaken.

14. The following statement shows the net consolidated assessment for the province compiled from three preceding statements :—

STATEMENT B—3 (*vide* TABLE VII AND III—A).

			MAJOR.		MINOR.			Grand Total.
			Capital.	Capital.	Revenue.	Agricultural.	Total.	
			1	2	3	4	5	
			Rs.	Rs.	Rs.	Rs.	Rs.	
1887-88	...	{ Kharif ... Rabi ...	7,39,475 93,193	12,73,773 1,46,067	16,88,541 3,01,503	2,428 5,520	29,64,742 4,53,090	37,04,217 5,46,283
		Total	8,32,668	14,19,840	19,90,044	7,948	34,17,832	42,50,500
1888-89	...	{ Kharif ... Rabi ...	9,37,048 1,47,058	14,37,293 1,99,351	18,63,387 2,41,046	2,746 4,741	33,03,426 4,45,138	42,40,474 5,92,196
		Total	10,84,106	16,36,644	21,04,433	7,487	37,48,564	48,32,670
1889-90	...	{ Kharif ... Rabi ...	9,40,876 2,17,866	14,75,429 3,25,711	18,63,774 3,99,764	5,240 5,820	33,44,443 7,31,295	42,85,519 9,49,161
		Total	11,58,742	18,01,140	22,63,538	11,060	40,75,738	52,34,480
1890-91	...	{ Kharif ... Rabi ...	8,34,684 1,80,243	15,59,227 3,47,933	18,34,603 3,98,068	2,651 6,546	33,96,481 7,52,547	42,31,165 9,32,790
		Total	10,14,927	19,07,160	22,32,671	9,197	41,49,028	51,63,955
1891-92	...	{ Kharif ... Rabi ...	6,17,678 2,50,284	15,23,196 3,50,900	18,23,676 5,49,767	1,450 5,301	33,48,852 9,35,968	39,66,030 11,86,222
		Total	8,67,962	19,04,096	23,73,443	6,781	42,84,820	51,52,252
Average	...	{ Kharif ... Rabi ...	8,13,952 1,77,723	14,53,783 2,79,992	18,14,796 3,78,029	2,909 6,586	32,71,493 6,63,607	40,85,440 8,41,330
		Total	9,91,675	17,33,775	21,92,825	8,495	39,35,095	49,26,770
1892-03	...	{ Kharif ... Rabi ...	8,40,191 2,32,453	15,40,257 4,05,727	16,96,308 8,41,472	1,624 4,606	32,38,189 12,31,805	40,78,380 14,84,243
		Total	10,72,629	19,45,984	25,37,780	6,230	44,89,994	55,62,623
Increase or Decrease	...	{ Kharif ... Rabi ...	+26,239 +54,715	+86,474 +1,25,735	-1,13,488 +4,63,443	-1,285 -980	-33,299 +5,88,193	-7,061 +6,42,913
		Total	+80,954	+2,12,209	+3,44,955	-2,265	+5,54,899	+6,35,862

The total consolidated assessment for the province, excluding remissions, comes to Rs. 55,62,623, exceeding the average by Rs. 6,35,952 and that of the previous year by Rs. 4,10,371. The assessment on kharif is fairly maintained, being only Rs. 7,061 below the average, though considerably less than that of three of these years. This result is not due to failure of any canal as in previous year, but to remissions on account of floods in Western Nāra and Karāchi districts, and is wholly accounted for under the head Minor Revenue Works, as already explained. These works, however, more than recouped the loss in kharif by the splendid returns they show for the rabi crop. Under Minor Works Capital and Revenue the assessments of the year are the largest recorded, while that for Major Works is Rs. 86,113 below the figures of 1889-90 only.

In the crop returns furnished by the Revenue Department there is a new column "Spill except from Government canals." Under this heading the following areas and assessments have been shown for Shikārpur and Karāchi:—

		Area. Acres.	Assessment. Rs.
Shikārpur	...	68,070	2,31,897
Karāchi	...	17,744	39,666
Total	...	85,814	2,71,563

As this cultivation and revenue have been credited to the canals by the revenue officers, it apparently means that the canals were fed by flood water which stopped the regular supply. In the Hyderabad and Upper Sind Frontier districts, the cultivation and revenue under same head have not been credited to canals as being due to spill not connected with them.

The figures are as follows :—

			Area.	Assessment.
			Acres.	Rs.
Hyderabad	...	...	94	343
Upper Sind Frontier	...	...	2,004	4,684
Total	...	...	2,098	5,027

In the Thar and Parkar district there was no such cultivation.

As shown in the map accompanying this report almost the whole of the province is now, or shortly will be, under what is known as the irrigational settlement, by which cultivation is assessed according to the description of water-supply which is determined for each year by the subordinate officials of the Revenue Department. The irrigational settlement has succeeded what was known as the revised settlement still in force in a few talukas, and the rates under each are given in the following statements :—

Statement showing the rate of assessment and hakabo per acre on each kind of kharif cultivation under different settlements in the Province of Sind for 1892-93.

District.	Total area of the district.	TALUKAS.			Total area of jaghira.	IRRIGATIONAL SETTLEMENT.						REVISION SETTLEMENT.			
		Irrigational Settlement.	Revision Settlement.	Not yet settled.		Rice.		Other crops.		Lift.		Kharif.		Rabi.	
						Vary		Vary		Vary		Vary		Vary	
						From		From		From		From		From	
						From	To	From	To	From	To	From	To	From	To
	Acres.				Acres.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Karachi ...	90,73,420	11	2	All settled.	1,30,929	2 4	4 0	1 10	3 3	1 4	2 10	3 4	4 4	2 2	3 0
Hyderabad ...	57,77,953	10	3	...	5,01,852	2 4	4 0	1 12	3 8	1 0	3 0	3 10	5 6	2 12	3 5
Shikarpur...	61,85,426	12	2	...	3,63,840	2 12	4 8	2 0	4 0	1 12	3 8	3 12	5 8	2 12	3 6
Thar and Parkar	81,45,500	3	...	4	6,392	2 0	2 10	1 4	2 8	1 2	2 0	...	...	...	...
Upper Sind Frontier	13,76,925	4	...	All settled.	35,293	2 10	4 0	1 14	8 8	1 10	5 0	...	...	...	...

District.	NOT YET SETTLED.				HAKABO.				REMARKS.	
	Plow moki.		Lift.		Rice.		Other Crops.			
	Vary		Vary		Vary		Vary			
	From		From		From		From			
	From	To	From	To	From	To	From	To		
Karachi ...	Rs.	Rs.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	In the Shikarpur district hakabo rate varies from 7 to 10 annas per acre with the single exception of the Khairpur Jungi Jagir land irrigated by the Gahwarwah, where the rate is Rs. 1 per acre on rice lands only, vide Commissioner in Sind's No. 1513 of 4th May 1889.	
Hyderabad ...			All settled.		0 7	0 8	0 5	0 6		
Shikarpur...			Do.		0 7	0 9	0 5	0 7		
Thar and Parkar			Do.		0 7	0 10	0 5	0 8	The rate of Rs. 2 per acre in both kharif and rabi is levied on the unsettled villages of the Kashmer and Thul talukas to the west of the bund. Rs. 2 1/2 in kharif and Peshwar to the east of the bund on the side of the river. Rs. 3 on the unsurveyed villages transferred from Ghotki to Kashmer, and 8 annas on Simko cultivation.	
Upper Sind Frontier			Thallis.		0 9	0 9	0 6	0 6		
			All settled.		0 10	0 10	0 8	0 8		

Statement showing the rate of assessment per acre on each kind of rabi cultivation under different settlements in the Province of Sind for 1892-93.

District.	Land artificially flooded in the inundation season and that aided by lift.				Land naturally flooded and that aided by lift.				Rabi lift.		Natural and artificial inundation aided by lift and flow.				Wheat flow.		Wheat lift.		Other lift cultivation.		Other flow cultivation.		Remarks.							
	Vary				Vary				Vary		Vary				Vary		Vary		Vary		Vary									
	From		To		From		To		From		To		From		To		From		To		From			To						
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.		Rs. a.						
Karachi ...	1	8	4	4	1	12	4	12	2	0	3	12	2	0	2	13	...	...	...	...	...	...	...							
Hyderabad ...	1	8	4	0	1	8	4	0	2	0	4	0	2	0	4	0	...	...	...	...	...	...	...							
Shikarpur ...	2	0	4	8	2	4	5	0	2	12	4	4	3	8	4	6	...	...	...	...	...	...	...							
Thar and Parkar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	8	2	0	2	0	1	2	1	2	1	4	1	4
Upper Sind Frontier	1	14	4	4	2	2	4	4	1	10	4	0	...	...	...	...	...	...	...	...	...	...	...	...						
The rates of Rs. 2-10-0 and Rs. 1-8-0 per acre are respectively levied for ploughed and unploughed cultivation of wheat, barley and other crops in the unsettled villages of the Kashmir and Thul talukas on the river side, while only 8 annas per acre are levied on the Simko cultivation; but the rate of Rs. 3-0-0 per acre is levied on wheat and barley cultivation in the villages transferred from Ghotki to Kashmir, and other crops ploughed and unploughed are separately charged at Rs. 2-2-0 and 1-8-0 per acre in these villages.																														

15. In the following statement the figures shown in the preceding paragraph are given in detail by districts and the results for each compared with the average and the preceding year :—

STATEMENT B—4 (vide TABLES VII AND III A.)

Districts.	Major.		Minor.			Grand Total, 1892-93.	Total, 1891-92.	Average, 5 years.	Comparing 1891-92.	Compared with average.
	Capital.	Revenue.	Capital.	Revenue.	Total.					
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals (Kharif District.)	4,43,123	...	...	1,634	1,634	4,44,747	2,61,362	4,77,011	+1,77,353	-32,264
	1,10,277	...	...	4,006	4,006	1,14,683	1,22,516	63,941	-7,633	+50,945
Total	5,53,400	...	...	6,230	6,230	5,59,630	3,59,878	5,40,952	+1,69,762	+18,678
Shikarpur Canals (Kharif District.)	...	3,46,332	...	3,46,332	3,46,332	2,66,536	2,97,029	+79,996	+49,202	...
	...	2,43,216	...	2,43,216	2,43,216	1,66,313	97,537	+76,843	+45,359	...
Total	...	5,89,548	...	5,89,548	5,89,548	4,32,769	3,94,566	+1,56,839	+1,94,662	...
Ghar Canals Dis- (Kharif trict.)	...	7,64,999	...	7,64,999	7,64,999	7,50,421	7,13,718	+14,578	+51,281	...
	...	2,91,578	...	2,91,578	2,91,578	2,83,258	2,90,866	+8,060	+90,415	...
Total	...	10,56,577	...	10,56,577	10,56,577	10,33,679	9,11,584	+23,598	+1,41,699	...
Western Nara (Kharif District.)	...	4,23,279	...	4,23,279	4,23,279	4,95,945	4,96,311	-72,136	-75,022	...
	...	4,16,749	...	4,16,749	4,16,749	2,53,992	1,71,945	+1,62,917	+2,45,104	...
Total	...	8,40,028	...	8,40,028	8,40,028	7,49,217	6,69,906	+90,911	+1,70,672	...
Eastern Nara (Kharif District.)	3,97,068	...	...	3,97,068	3,97,068	3,31,796	3,39,816	+45,372	+57,253	...
	1,92,161	...	...	1,92,161	1,92,161	1,23,039	1,19,336	+16,978	+2,825	...
Total	5,19,229	...	...	5,19,229	5,19,229	4,54,835	4,59,151	+54,294	+60,878	...
Hyderabad Co- (Kharif nals District.)	...	2,06,955	5,89,578	...	7,96,533	7,93,833	7,52,444	7,59,620	+11,359	+45,233
	...	21,858	1,69,370	...	1,91,228	1,31,255	85,412	91,468	+41,843	+69,797
Total	...	2,28,813	6,58,948	...	8,87,761	8,25,088	8,43,896	8,51,088	+50,292	+1,26,030
Enli Canals (Kharif District.)	...	5,71,303	23,610	...	5,94,913	5,99,913	6,23,715	5,98,617	-25,602	+1,268
	...	92,564	9,715	...	1,02,279	1,02,279	94,175	80,677	+6,104	+21,602
Total	...	6,63,867	33,325	...	7,02,192	7,02,192	7,17,890	6,79,294	-35,696	+23,968
Karachi Canals (Kharif District.)	...	...	3,08,208	...	3,08,208	3,08,208	4,28,511	4,23,310	-1,29,302	-1,14,101
	...	...	62,432	...	62,432	62,432	45,550	45,550	+13,775	+10,572
Total	...	...	3,70,640	...	3,70,640	3,70,640	4,74,061	4,68,860	-1,07,527	-97,129
Total for Kharif Sind... (Rabi)	8,46,191	16,40,257	16,96,398	1,624	22,33,189	40,78,960	39,66,090	40,35,441	+1,12,350	-7,061
	2,32,433	4,06,737	9,41,472	4,606	12,51,806	14,91,245	11,86,272	8,41,330	+2,98,021	+6,12,913
Total	10,78,624	10,46,994	26,37,870	6,230	44,84,994	55,61,625	51,52,362	49,26,771	+4,10,371	+4,35,832

* Includes assessment on unauthorized cultivation.

† Government

Foreign and Sind Jighy ... 1,29,631

Rs. 54,53,333

1,09,291

55,62,633

In this statement the Karáchi canals district shows very badly, the kharif assessment giving a large deficit and the rabi only a small increase. Remissions exceeding 1 lakh were given on the kharif crop, and but a small part was recouped by rabi, the climate being unfavourable to the growth of this crop. The remissions are due to the weakness of the river embankments which were not able to withstand the high inundation, increased in intensity by heavy rain at the most critical time. With the exception of the Western Nára, in which also heavy remissions were given for kharif destroyed by rain and river floods, the returns in all the other districts compare very favourably with those of previous years. In a part of this district, not touched by flood, the Upper Nurwáh continued to give excellent results. This canal improved and extended at a cost of Rs. 18,060 has now been in operation for 4 years, and the following figures show the effect of the work on cultivation and revenue :—

Years.	CULTIVATION.			Revenue.
	Kharif.	Rabi.	Total.	
	Acres.	Acres.	Acres.	
Average previous to improvements	3,228	59	3,287	6,484
1889-90	3,897	773	4,670	9,031
1890-91	4,266	853	5,119	9,968
1891-92	4,454	892	5,346	10,402
1892-93	4,515	2,616	7,131	16,482

The increased revenue obtained in these 4 years has paid off the expenditure, leaving Rs. 2,087 and all future increments clear profit. Of the increase of revenue in 1892-93 some Rs. 2,500 are due to change of settlement and the balance Rs. 3,580 to increased cultivation. In the Begári district the recovery made since last year is due to the new mouth made for the Desert Canal. From the Shikárpur district the returns are remarkable, and the heavy increase of assessment shown is mainly due to more correct separation of cultivation and fairer distribution between canal and flood water in Rohri. In this district the improvements of the Deharwah completed in 1888-89 at a total cost of Rs. 11,951, and now in operation for 4 years, show capital results under new distribution as follow :—

Year.	Cultivation.	Revenue.
	Acres.	Rs.
Average before improvement.	17,234	41,352
1889-90	18,590	46,960
1890-91	10,041	26,628
1891-92	12,947	37,432
1892-93	40,744	1,14,029

In 1892-93 the large increase is mainly due to the rabi crop, of which some 20,000 acres were credited to the canal, but there is also a fair increase of 1,800 acres in kharif.

The introduction of the irrigation settlement into part of the Rohri talúka of this district, by which the assessment was raised by about $1\frac{1}{2}$ annas per rupee, helped to swell the total increase. In the Ghár district there are no special reasons for the continued progress evident from the returns. The returns from Hyderabad are very encouraging, showing a steady advance in this hitherto rather backward district. Of the favourable results the introduction of the irrigational settlement into the Mirpur Khás and Shahdádpur talúkas accounts for some Rs. 46,000; and the balance is due to general improvement in working of canals and the following small works :—

Names of Works.	Cost.	Increased		REMARKS.
		Cultivation.	Remissions.	
	Rs.	Acres.	Rs.	
Extension of Mirwah	4,257	2,223	4,115	Part to settlement.
New mouth Lohano... ..	6,510	720	5,680	
Embankment Sarfraz	9,761	3,158	5,140	

The returns from these small works are very satisfactory, and may be taken as a fair example of what may be expected from similar expenditure on the old and faulty canals in this district.

The assessment on Dubari cultivation is included in the net consolidated assessment and was as follows from each revenue district :—

		Cultivation.	Assessment.
		Acres.	Rs.
Upper Sind Frontier	...	12,121	3,030
Shikārpur	...	166,783	41,696
Thar and Pārkar	...	7,876	1,969
Hyderabad	...	12,152	3,038
Karāchi	...	29,572	7,393
Total	...	228,504	57,126

16. The net consolidated assessment on unauthorized cultivation has this year been included in Canal Returns VIII and VIII—A from all revenue districts except Shikārpur, and therefore cannot be shown separately. In Shikārpur it amounted to the small sum of Rs. 5,056 which brings the total for the province up to Rs. 59,08,512, including village cess taken at Rs. 3,40,893.

17. The following statement shows the total for collection on Government land in the 5 revenue districts and the actual realizations of the year :—

STATEMENT C (*vide* TABLE VI—A.)

District.	Unrealized balance at end of previous year.	Deduct Remission on account of former years.	Net amount realizable on account of outstandings at beginning of year.	Net consolidated assessment during year as per canal Return VIII.	Total for collection.	Actual Receipts during year.	Balance outstanding at end of year.	Irrigation share of collection.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Upper Sind Frontier... ..	41,632	3,806	38,047	5,37,246	5,75,232	5,49,618	25,875	4,94,656
Shikārpur	560	.....	560	21,64,347	21,68,407	21,56,366	9,041	19,46,730
Thar and Pārkar	*752	302	449	4,64,257	4,64,806	4,61,361	—55	4,18,376
Hyderabad	1801	7	1794	16,08,390	16,07,084	16,01,419	5,662	15,41,277
Karāchi	14,433	7,353	7,180	6,50,596	6,87,773	16,66,601	21,271	5,26,757
1892-93	58,195	11,168	47,020	54,53,338	55,00,362	54,38,765	61,597	54,94,826
1891-92	85,580	29,261	56,319	50,44,749	51,01,068	50,43,086	57,982	44,53,870
Increase or Decrease	—27,382	—18,093	—9,299	+4,03,583	+3,99,294	+3,95,956	+3,338	+3,56,046

* Note.—The figures for Thar and Pārkar include unauthorized cultivation.
† Differs from figures given in last year's report due to adjustment in the Revenue Department.
‡ Includes Rs. 71 which are said to have been recovered last year in advance.
§ Includes collections on account of unauthorized cultivation.
|| The sum of Rs. 48,94,526 shown in column 9 is inclusive of refunds of revenue, and they could not be deducted from each revenue district as correct figures have not been received from Revenue Department. The Examiner in a statement headed "Actual receipts on account of irrigation share for 1892-93" appended to the statistics, shows Rs. 49,46,039 on this account; the difference is Rs. 61,213; this is on account of Begri Canal in the Shikārpur Collectorate, for which the Examiner appears to have taken credit twice.

The total sum for collection amounted to Rs. 55,00,362, being more than that of the previous year by Rs. 3,99,294, the only decrease being in the Karāchi district. The actual receipts of the year amounted to Rs. 54,38,765, leaving an outstanding balance of Rs. 61,597 or Rs. 3,338 in excess of last year's, due most probably to the larger sum to be collected. The outstandings are still

largest in the Upper Sind Frontier and Karachi districts, but show a satisfactory reduction in the former and a similar increase in the latter.

18. In the following statement are shown the area of cultivation, and the assessment on jâghir and foreign land, the unrealized balance at end of last year, the actual realizations and the outstanding balances of the year under report :—

STATEMENT C—1 (*vide* TABLE III A).

District.	AREA CULTIVATED DURING YEAR.			Unrealized balance at end of last year.	Amount of Assessment of the year.	Total for collection.	Remissions.	Net Total realizable.	Actual realization during year.	Balance outstanding at end of year.	Remarks.
	Kharif.	Rabi.	Total.								
1	2	3	4	5	6	7	8	9	10	11	12
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Kelat Land Foreign—											
1892-93	54,010	9,504	63,514	43,683	63,517	1,07,200	20,300	84,940	64,069	32,771	
1891-92	39,891	10,531	50,722	23,724	50,725	74,459	10,035	64,424	20,741	43,683	
Increase or Decrease ..	+14,119	-1,327	+12,792	+19,949	+12,792	+32,741	+10,325	+22,416	+43,328	-10,912	
Jâghir Lands in Sind—											
Upper Sind Frontier	752	60	842	105	425	530	---	530	600	50	
Shikarpur	28,218	11,666	39,884	4,591	16,837	20,978	---	2,978	14,024	6,854	
Thar and Parkar	3,350	179	3,529	---	1,843	1,043	---	1,813	1,648	---	
Hyderabad	94,894	11,122	106,016	3,018	40,961	43,979	---	43,979	83,315	4,664	
Karachi	8,550	8,751	17,311	2,479	6,718	9,897	---	9,897	6,999	3,068	
1892-93	135,794	31,788	167,582	10,893	66,124	77,027	---	77,027	67,881	15,046	
1891-92	137,397	27,785	165,192	15,480	66,813	82,293	---	82,293	71,286	10,897	
Increase or Decrease ..	-1,603	+4,003	+2,390	-4,587	-679	-5,096	---	-5,266	-10,015	+4,749	
Total for 1892-93	183,804	41,292	225,096	54,576	122,651	1,84,227	30,300	1,63,867	1,16,480	48,417	
Province, 1891-92	177,298	38,638	215,914	89,314	1,17,686	1,56,709	10,035	1,46,717	95,137	54,590	
Increase or Decrease ..	+16,516	+2,666	+15,182	+15,362	+12,113	+27,475	+10,325	+17,150	+23,313	-6,163	

Note.—Unrealized balance shown in Column 5 does not in some cases correspond with those shown in last year's report; this is due to adjustments made by the Revenue Department.

As the revenue from jâghir and foreign land is treated as "Direct" the figures in this statement are for the financial year ending 31st March, and the results are due to two inundations, including collections and remissions made after the 31st March 1892 for the crop grown on the inundation of 1891. Compared with last year's the returns are favourable, showing increases under all headings. The outstandings in Kelat show a decrease, but it is apparently due to remissions granted for the previous year; there is an increase of Rs. 4,749 due from jâghir cultivation.

19. Statement C—2 following shows miscellaneous canal revenue realised during the year and for 5 previous years :—

STATEMENT C—2 (*vide* TABLE III.)

Year.	DISTRICTS.									Total.
	Begari Canals.	Shikarpur Canals.	Ghar Canals.	Eastern Nara.	Western Nara.	Hyderabad Canals.	Fuleli Canals.	Karachi Canals.		
1	2	3	4	5	6	7	8	9	10	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1887-88	947	2,073	4,543	15,173	10,944	3,307	4,983	3,440	45,310	
1888-89	957	2,164	4,600	15,824	12,705	3,987	4,809	4,468	49,604	
1889-90	821	4,035	7,201	15,708	12,070	3,993	4,299	7,040	55,167	
1890-91	1,045	2,209	7,003	18,785	11,542	3,976	4,163	6,380	55,105	
1891-92	936	3,334	9,650	15,567	17,530	4,724	6,971	5,298	63,909	
Average	941	2,763	6,600	16,211	12,976	3,998	5,005	5,325	53,819	
1892-93	1,677	4,930	7,656	16,218	18,170	6,929	3,744	6,262	64,886	
Increase or Decrease ..	+ 736	+ 2,167	+ 1,056	+ 7	+ 5,194	+ 2,231	-1,261	+ 937	+ 11,067	

The miscellaneous canal revenue is about the same as in the preceding year, though Rs. 11,067 over the average.

The Fuleli is the only district in which the return is not above the average.

20. The actual realizations of the year under their several heads are given in the following statement, and compared with those of the 5 preceding years and with the average :—

STATEMENT C—3 (*vide* TABLE VI—A).

Years.	GOVERNMENT.	FOREIGN LANDS IN KELAT AND JÁGHIR LAND IN SIND.		Miscellaneous.	4 per cent. of Irrigation share of proceeds of sales of occupancy right.	Total actual Receipts.
	Irrigation share of net consolidated assessment collected.	Hakába.				
		Foreign.	Jághir.			
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	37,46,333	58,925	53,578	45,310	...	39,04,146
1888-89 ...	42,15,214	1,17,173	76,962	49,604	...	44,58,953
1889-90 ...	45,56,187	92,443	60,203	55,167	11,072	47,75,972
1890-91 ...	45,08,201	52,770	68,620	55,105	15,066	46,99,762
1891-92 ...	45,38,780	20,741	71,659	63,909	20,622	46,77,875
Average...	43,12,943	68,410	66,205	53,819	9,352	45,10,729
1892-93...	*48,94,826	54,069	61,381	64,886	†22,884	50,98,046
Increase or De- crease...	+ 5,81,883	—14,341	—4,824	+ 11,067	+ 13,532	+ 5,87,317

* *Vide* remark in Statement C.

To end of 1891-92	...	...	...	Rs. 20,622
During 1892-93	...	...	...	2,262
				<u>22,884</u>

Note.— 28,932 acres of land were sold during the year.

The irrigation share of net consolidated revenue collected exceeds the average by Rs. 5,81,883 and that of previous year by Rs. 3,55,046. The returns from jághir and foreign land are not so satisfactory. During the year the right of occupancy in 28,929 acres was sold for Rs. 62,813 and 4 per cent. on the irrigation share, amounting to Rs. 2,262, credited to revenue. The gross canal revenue collected amounted to Rs. 50,98,046, the largest sum yet received, and with Rs. 2,75,330, the irrigation share of the village cess, would come to Rs. 53,73,376.

21. The remissions for seven years ending with 1892-93 are shown in the following statement :—

STATEMENT D.

Districts.	1886-87.	1887-88	1888-89.	1889-90.	1890-91.	1891-92.	Average.	1892-93.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals District ...	20,335	13,032	16,116	26,930	7,701	1,06,401	31,753	21,458
Shikarpur Canals District ...	668	161	174	45	916	2,060	661	315
Ghar Canals District ...	92,277	21,387	3,564	61,745	1,994	2,557	30,537	5,752
Western Nara District ...	4,903	4,173	18,341	43,138	563	7,360	13,180	86,742
Eastern Nara District ...	43	177	874	4,996	2,324	...	1,386	1,836
Hyderabad Canals District ...	3,418	3,021	3,809	3,917	10,349	1,012	6,078	5,071
Fuleli Canals District ...	707	3,203	876	30,918	2,664	1,268	6,923	19,637
Karachi Canals District ...	14,068	16,833	18,591	56,553	41,431	23,306	28,514	1,09,959
Total ..	1,36,419	61,937	63,045	2,35,442	67,845	1,43,964	1,17,777	2,50,770

The year under report is the worst of the series, the remissions amounting to the large total of Rs. 2,50,770. For this unsatisfactory result the Karáchi and Western Nára districts are mainly responsible; in the former the very large remissions are due to damage done by floods from the river through the embankments, and in the latter to this cause also, but in a greater measure to rain flood from the hills.

In the Begári district the sum is large and due chiefly to the lowness of the river at the commencement of the season and to the silt caused in the mouth of the Desert Canal by rain flood, which prevented full advantage being taken of the late rise.

In the Fuleli also the remissions are heavy, due to breaches in low-lying canal and in the Hajipur bund, which did more damage than usual owing to the heavy rain which stopped the off-take from canals, and to the fact that the new escapes were not completed.

22. The following statement is given to show the loss to canals represented by the difference in rates on Government and other land :—

STATEMENT E (*vide* TABLE III—A. AND VII.)

	Hakabo at present assessed.	Loss.	Jaghír Revenue at full rates.	Water share of Government Land Assessment.	Total what it should be for the Province.
1	2	3	4	4	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Major Works. { Foreign ...	63,517	34,526	98,043	.....	98,043
Jaghír ...	5,043	24,029	29,072	9,21,987	9,51,059
Minor Works. { Capital ...					
Jaghír ...	33,832	2,10,893	2,44,725	17,20,936	19,65,661
Do. ... Revenue					
Jaghír ...	27,259	1,93,040	2,20,299	22,59,471	24,79,770
Do. ... Agricultural	...	...	...	.....	...
Total ...	*1,29,651	†4,62,488	5,92,139	49,02,394	54,94,533
Agricultural ...				5,606	5,606
				+49,08,000	55,00,139

* As per Table III-A.

† As per Table VII.

‡ As per Examiner's Statement.

In paragraph 22 of Government Resolution No. 41 W. I.—658 of 1893, reviewing the Revenue Report of 1891-92, Government remarked that this statement was unnecessary, but they have since approved of its continuance pending final settlement of the rates to be levied from jaghír cultivation; and Government Resolution No. 1665, Revenue Department, of 1893, directs that the question should be noticed in this report. It would be difficult to take out the proportionate share of the cost of clearance and improvements assignable to supplying water to jaghír land with any degree of accuracy, but a fair and simple approximation can be arrived at by taking the cost of maintenance per acre in the canal system by which the jaghírs are watered and multiplying it by the cultivation in the jaghír. It is understood that the jaghír survey has been completed in the Fuleli district, but the result has not yet been communicated, and the figures in the following statement, which shows the area and assessment of jaghír cultivation in this district, are taken from previous reports.

Area of Jāghir cultivation and Assessment on the Fuleli Canal for 5 years previous to 1892-93 compared with that year.

Years.	AREA.			ASSESSMENT.			Cost of main-tenance per acre.	Approximate cost of maintenance.	Remarks.
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.			
1887-88 ...	52,756	3,870	56,626	17,445	1,154	18,599	0-9	50,963-4	
1888-89 ...	50,366	3,641	54,007	23,452	817	24,269	0-9	48,606-3	
1889-90 ...	50,075	3,415	53,490	22,754	679	23,433	0-8	42,792-0	
1890-91 ...	49,879	5,552	55,231	21,937	1,868	23,805	0-8	44,184-8	
1891-92 ...	49,427	5,582	55,009	21,002	2,228	23,230	0-7	38,506-3	
Average ...	50,501	4,372	54,873	21,318	1,369	22,687	0-8	43,698-4	
1892-93 ...	48,713	8,717	57,430	21,150	3,478	24,628	0-7	40,201-0	

These figures give as fair and close an approximation to the actual cost of watering jāghir cultivation in the Fuleli system as could be arrived at for practical use, and they show that the hakābo does not nearly pay for the cost of providing water, if the figures of cultivation are correct. It would be more difficult still to calculate the proportionate share of cost of improvements which jāghirdārs should pay, but when the hakābo has been finally fixed, it will increase with any increase of cultivation due to the improvements, while the cost of maintenance will probably decrease and Government will in this way get some return.

23. The expenditure on maintenance and repairs of canals and river embankments, and the cost of establishment and of revenue collection are shown in the following statement :—

STATEMENT G.

Years.	MAINTENANCE AND REPAIRS.																		Revenue Collection.	Total.
	Major Works.						Minor Works.						Total.							
	Capital.			Capital.			Revenue.			Agricultural.			Total.			Establishment proper.				
	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.	Works.	Establishment charged to Works.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1887-88	...	...	1,21,620	...	...	3,12,589	...	...	5,14,134	...	...	98,158	8,24,019	2,07,483	10,41,501	2,61,116	13,02,617	3,32,170	16,44,78	
1888-89	...	...	1,22,142	...	...	3,33,285	...	...	3,03,260	...	...	65,262	7,21,023	1,99,428	9,20,449	2,61,221	11,81,720	3,91,630	15,73,32	
1889-90	...	...	1,52,102	...	...	3,24,738	...	...	3,09,824	...	...	79,327	7,85,915	1,81,002	9,65,317	2,40,911	12,14,5-8	4,25,906	16,39,62	
1890-91	...	...	1,29,854	...	...	3,41,608	...	...	4,85,749	...	...	69,013	8,01,314	1,76,101	9,77,315	2,44,759	13,22,074	4,38,001	16,44,075	
1891-92	94,171	37,748	1,31,919	2,68,249	35,638	3,06,977	4,92,074	77,413	4,79,467	36,405	3,412	69,817	8,00,979	1,87,201	9,88,180	2,57,160	17,45,340	4,24,558	16,69,598	
Average...	...	...	1,31,547	...	...	3,25,028	...	...	4,45,696	...	...	75,231	7,83,230	1,90,382	9,73,792	2,54,669	12,23,261	4,90,553	16,34,111	
1892-93	1,25,424	38,311	1,63,735	1,42,425	39,311	1,82,236	3,61,225	71,638	4,32,868	1,78,960	32,317	2,01,286	6,03,143	1,72,072	9,30,215	2,55,166	12,35,384	5,03,561	17,38,943	
Difference	...	...	+32,188	...	...	-1,42,702	...	...	15,738	...	...	+1,25,900	+19,918	-18,290	+1,028	+508	+2,123	+1,02,708	+1,04,831	

Note.—The sum of Rs. 1,78,960 shown under Agricultural Works for 1892-93 includes Rs. 1,16,358 on account of old expenditure on improvements to certain canals, the details of which is recorded in Table IV, vide G. R. No. 77 A. I.,—598 of 1893.

* Includes Tools and Plant.

The outlay of the year on Maintenance and Repairs amounted to Rs. 9,80,215, being less than that of the previous year by Rs. 7,967 and exceeding the average by Rs. 1,623. On Major Works the expenditure was high, owing to special clearance in the Desert Canal and in the Eastern Nāra below the Thurwah weir. Of the total expenditure on Works under this head Rs. 5,383 have been debited to Agricultural works under orders from Government of India, as being the cost of maintenance of what are now Major Works, in their original condition. Under the head Minor Capital the statement shows a very large decrease of expenditure, but this is on account of the transfer of Rs. 1,10,975 of the actual expendi-

ture on these works to the head Agricultural as due to cost of maintenance of the old canals. The expenditure under the head Agricultural has thus been increased by Rs. 1,16,358 transferred from Major and Minor capital, but it still shows an increase of Rs. 26,396 over that of previous year, and this is due to the large cost of repairing the previous year's damage to embankments. The cost of Establishment proper shows little change; but there is a satisfactory decrease in that of establishment charged to works which is 18,290 below the average and Rs. 15,129 less than in 1891-92. The debit to canals for revenue collection amounted to Rs. 5,03,561. This is a heavy charge against canals which receive no credit for the village cess from which some of the collecting establishment is paid; either the cess should be credited to canals or its amount deducted from the charge for revenue collection.

The following is an abstract showing details of canal clearance expenditure on different kinds of work in each district :—

Name of District.	Clearance proper in Canals.		Jungle cutting.	Removing koodas.	Improving canals' heads.		Side-sloping and repairing curves.		Buildings and Gardens.	Regulators, Bridges and Sillings.	Repairs to Canal banks.		Removing spoil and inspection paths.
	Cubic feet.	Cost.			Cubic feet.	Cost.	Cubic feet.	Cost.			Cubic feet.	Cost.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Ra.	Rs.	Rs.	Rs.		Rs.		Rs.	Ra.	Rs.		Rs.	Rs.
Benari Canals ...	18,754,180	54,968	3,792	244	...	...	...	...	4,199	1,256	802,609	2,803	598
Shikarpur Canals ...	4,608,873	22,775	2,138	2,025	...	...	177,358	878	2,982	3,028	4,788,348	13,597	954
Ghar Canals ...	8,887,551	41,738	2,201	5,994	...	...	13,900	84	1,886	899	4,685,731	21,420	...
Western Nara ...	10,831,273	58,632	1,946	2,919	...	...	...	1,779	4,571	4,571	2,827,757	10,960	563
Eastern Nara ...	7,830,264	31,259	5,604	360	...	...	...	10	6,949	7,082	1,465,486	6,084	39
Hyderabad Canal ...	32,031,882	1,13,446	4,359	76	...	...	9,000	59	1,017	82	1,879,086	7,203	163
Fuleli Canal ...	36,871,608	1,17,963	3,994	2,990	126,000	535	1,001,098	4,468	431	1,989	2,270,532	20,420	749
Karachi Canals ...	6,880,469	25,812	3,220	2,136	...	...	69,000	649	361	9,225	7,728,665	24,170	10
Total ...	173,576,730	4,46,875	27,464	16,323	126,000	635	1,260,340	6,159	19,578	26,632	24,263,854	96,487	3,068

Name of District.	Repairs to river embankments.		Improvements to Loops and river embankments.		Protecting slopes of embankments and canals.	Miscellaneous.	Continuances.	Extra-ordinary Akbalkani expenditure, closing breaches &c.	Total Works.	Establishment.				Total works and establishment.
	Cubic feet.	Cost.	Cubic feet.	Cost.						Akbalkani.	Revenue.	Works.	Total.	
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Ra.	Rs.	Ra.	Rs.	Ra.	Rs.	Rs.	Rs.	Ra.	Rs.	Ra.	Rs.	Rs.	Rs.
Benari Canals ...	1,294,504	11,117	...	819	96	5,096	1,391	12,453	98,426	14,214	4,105	3,581	21,900	1,26,328
Shikarpur Canals ...	1,973,857	5,596	1,578,545	11,943	2,454	359	425	1,744	70,929	9,591	1,999	5,147	16,737	87,666
Ghar Canals ...	458,001	2,763	...	...	...	7,389	564	...	84,748	10,628	2,449	7,655	20,730	1,05,474
Western Nara ...	725,739	2,824	273,458	1,237	467	715	864	6,161	74,121	9,860	25,595	8,081	18,716	92,467
Eastern Nara ...	...	...	...	...	18	2,418	15	1,842	61,670	12,827	4,215	8,758	25,800	87,470
Hyderabad Canals ...	...	...	...	...	...	4,304	...	2,196	1,32,899	8,460	4,132	12,958	25,538	1,58,437
Fuleli Canals ...	20,874	121	...	...	1,945	2,210	1,843	6,035	1,35,553	6,646	4,337	8,654	19,647	1,75,300
Karachi Canals ...	13,865,336	42,308	11,760	1,878	5,182	62	2,692	1,29,797	10,717	4,221	8,686	23,374	1,63,171	...
Total ...	16,872,311	64,440	1,852,003	25,179	6,878	25,833	5,144	33,423	8,08,148	82,761	28,083	61,238	1,72,072	9,80,215

24. The following statement shows the expenditure on Works (Repairs) and on establishment debited to works in each district :—

STATEMENT G—1 (*vide* TABLE IV).

Districts.	1889-90.					1890-91.					Total.
	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.	
		Supervising.	Abkalkani.	Total.			Supervising.	Abkalkani.	Total.		
1	2	3	4	5	6	7	8	9	10	11	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Begari Canals	87,622	13,084	35,011	49,125	1,36,754	57,325	14,191	22,334	36,525	94,050	
Shikarpur Canals	63,717	4,341	10,320	14,871	84,382	69,936	4,777	9,562	14,339	75,275	
Ghar Canals	1,05,504	8,002	32,006	40,008	1,42,512	97,107	8,854	18,173	27,081	1,84,144	
Western Nara	...	...	...	...	...	61,747	5,946	15,444	19,390	81,137	
Eastern Nara	29,437	4,643	16,364	29,407	47,844	39,355	7,963	12,512	21,477	69,332	
Hyderabad Canals	1,39,945	21,822	...	21,892	1,91,837	1,65,200	12,570	7,965	20,535	1,88,735	
Fuleli Canals	2,06,441	5,397	6,236	11,693	2,28,134	1,80,023	5,861	7,705	16,337	1,96,760	
Karachi Canals	1,31,242	5,296	18,510	23,806	1,55,048	1,33,321	6,244	14,517	20,461	1,53,792	
Total	7,83,915	62,055	1,19,547	1,81,602	9,65,517	8,01,214	69,119	1,06,983	1,76,101	9,77,315	

Districts.	1891-92.					1892-93.				
	Works.	Establishment debitable to Works.			Total.	Works.	Establishment debitable to Works.			Total.
		Supervising.	Abkaláni.	Total.			Supervising.	Abkaláni.	Total.	
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begri Canals ...	65,642	6,506	24,986	31,582	97,224	98,426	7,686	14,214	21,900	1,20,326
Sikhrpur Canals ...	79,253	7,773	12,295	19,978	90,291	70,929	7,146	9,591	16,737	87,666
Ghar Canals ...	79,751	9,398	14,488	23,786	1,03,537	84,748	10,104	16,826	24,790	1,16,479
Western Nara ...	51,399	6,505	10,791	17,094	69,493	74,121	8,656	9,690	15,946	72,467
Eastern Nara ...	34,914	13,188	8,742	21,930	56,874	61,670	15,873	22,827	25,900	87,479
Hyderabad Canals ...	1,84,060	22,674	8,873	31,547	2,15,697	1,32,899	17,098	8,450	25,538	1,58,437
Fulehi Canals ...	1,59,799	8,203	6,709	14,914	1,74,163	1,55,553	13,601	6,646	19,647	1,75,260
Karachi Canals ...	1,55,701	10,889	15,431	26,320	1,92,021	1,29,797	12,657	10,717	23,374	1,54,471
Total ...	5,00,979	81,985	1,02,210	1,87,201	9,98,190	8,06,143	89,511	92,761	1,72,072	9,50,215

In this statement the expenditure on establishment charged to Works is divided into two heads, Supervising and Abkaláni. Under the former the cost of all establishment engaged in supervision of works and general canal conservancy is included, and under the latter that of establishment engaged to watch canal banks and river embankments during the inundation. The expenditure on works is about the same as usual, being Rs. 7,164 more than that of previous year, while the charge for establishment shows a satisfactory decrease of Rs. 15,120 and is the lowest of the four years. Under the head Abkaláni there is a marked decrease, and a small increase under Supervising. These results are due to more correct distribution, and to the care taken by Executive officers in appointing Abkaláni Establishment only when required for its special purpose.

25. The following statement shows the expenditure on maintenance and repairs of canals and river embankments separately with the charges for establishment proper and revenue collection :—

STATEMENT G—2 (*vide* TABLE IV.)

Years.	CANALS.					RIVER EMBANKMENTS.						
	Works.	Establishment, Tools and Plant.	Total.	Revenue Collection.	Total.	Works.	Establishment, Tools and Plant.	Total.	Revenue Collection.	Total.	Grand Total (Cols 6 and 11.)	
1	2	3	4	5	6	7	8	9	10	11	12	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1886-87	6,62,498	2,23,331	8,85,822	3,28,154	12,13,998	1,65,424	48,596	2,14,020	1,240	2,15,260	14,29,246	
1887-88	8,58,756	2,21,264	10,80,024	3,41,424	14,21,448	1,52,743	39,550	1,92,293	746	1,93,039	16,44,757	
1888-89	8,01,176	2,20,302	10,21,478	3,50,914	14,14,972	1,17,393	40,369	1,57,662	716	1,58,378	15,73,359	
1889-90	8,64,612	2,19,617	10,84,229	4,22,862	15,07,091	1,00,595	29,424	1,30,029	1,012	1,31,071	16,38,462	
1890-91	8,36,769	2,07,731	10,44,500	4,21,102	14,65,602	1,29,008	37,928	1,66,936	899	1,67,835	16,44,075	
1891-92	8,36,789	2,08,460	10,45,249	4,23,918	14,69,167	1,51,391	48,755	2,00,146	639	2,00,785	16,69,694	
Average	8,13,301	2,16,876	10,30,177	3,88,762	14,18,939	1,39,877	40,679	1,80,547	889	1,81,227	15,90,569	
1892-93	8,20,261	2,12,149	10,32,410	4,43,519	14,72,929	1,59,854	43,620	2,02,974	63,042	2,06,916	17,38,945	
Difference	+9,457	-4,727	+1,730	+56,457	54,187	+20,277	+2,360	+22,637	+62,162	+84,789	+1,38,970	

Note.—The figures in Column 2 include cost of establishment charged to Works.

The expenditure on canals, though above the average, shows a steady decrease since 1889-90, while that on river embankments has uniformly increased. As canals would be useless if not protected by embankments of sufficient strength to prevent their being flooded, expenditure on the latter is of prime necessity until they have acquired sufficient strength and stability to give the required security. That expenditure has been increasing on embankments and decreasing on canals is chiefly due to the rise of level of water in the river in the Karachi and Western Nara districts, which makes less work necessary for canals but more for embankments. The returns show that the decrease of expenditure on canals has not in any way affected their working, as the area watered by them has steadily increased. In the Karachi district Rs. 11,180 were spent on new loop bunds from the repair grant; it has been decided that expenditure of this kind is not a fair debit to maintenance, and in future it will be differently treated.

26. Statement G—3 following shows the expenditure on New Works (Major and Minor) under its several sub-heads:—

STATEMENT G—3 (*vide* TABLE IV.)

Major.								43 Minor.		
Years.	49 Capital.			42 Revenue.			Grand Total, Major.	Capital and Revenue Accounts.		
	Works.	Establishment and Tools and Plant.	Total.	Works.	Establishment and Tools and Plants.	Total.		Capital.		
								Works.	Establishment and Tools and Plant.	Total.
							Works.				Establishment and Tools and Plant.	Total.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	1,30,476	47,750	1,87,226	.....	.....	.....	1,87,226	.....	.....	.....
1888-89 ...	52,433	21,959	1,14,392	.....	.....	.....	1,14,392	47,000	9,400	56,400
1889-90 ...	60,662	16,141	76,803	1,598	917	2,515	79,228	45,144	9,029	54,173
1890-91 ...	63,661	18,726	79,387	21,424	6,572	27,996	1,07,283	12,474	9,403	20,969
1891-92 ...	70,699	18,355	89,054	61,851	19,646	81,497	1,79,554	36,102	7,151	43,253
Average	85,379	23,984	1,09,254	16,637	5,427	22,064	1,31,738	29,144	5,815	34,959
1892-03 ...	1,61,139	41,613	2,02,802	36,382	5,797	42,179	2,47,981	67,332	14,153	81,485
Difference	+75,789	+17,659	+93,443	+19,425	+3,370	+22,795	+1,16,243	+38,248	+8,338	+16,560

43 Minor—continued.												Grand Total, Minor.	Total of Major and Minor.	
Years.	Capital and Revenue Accounts.			Revenue.			Agricultural.							
	Works.	Establishment and Tools and Plant.	Total.	Works.	Establishment and Tools and Plant.	Total.	Works.	Establishment and Tools and Plant.	Total.	Works.	Establishment and Tools and Plant.			Total.
1	12	13	14	15	16	17	18	19	20	21	22			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
1887-88 ...	17,532	4,226	21,778	63,312	12,300	75,612	84,526	20,150	1,06,676	2,04,006	3,91,322			
1888-89 ...	67,279	15,732	83,011	42,218	13,683	55,901	23,061	7,034	30,095	2,25,409	3,29,711			
1889-90 ...	12,667	2,342	15,009	1,38,179	34,082	1,72,261	1,46,414	57,183	1,83,597	4,42,056	6,51,228			
1890-91 ...	274	55	329	2,15,208	38,979	2,54,187	1,13,714	31,030	1,44,744	4,17,229	5,24,612			
1891-92 ...	16,696	3,720	20,226	1,88,115	29,297	2,17,412	49,352	12,351	61,703	2,92,294	4,13,445			
Average	22,862	5,215	28,077	1,32,812	24,725	1,57,537	83,813	21,550	1,05,363	3,16,896	4,48,674			
1892-03 ...	21,921	6,821	28,745	1,40,416	20,636	1,79,102	23,717	24,737	48,454	3,28,846	4,48,627			
Difference	-938	+1,606	+965	+16,604	+4,911	+21,265	-60,096	+3,167	-56,909	+11,910	+1,26,133			

* Includes Rs. 10,074 on account of stores for Mathematical Instrument Depot, Sind.

The expenditure on Major Works amounted to Rs. 1,97,541, or Rs. 64,991 more than in the previous year; of this sum Rs. 1,61,159 were debited to Capital and Rs. 36,382 to Revenue. Of the capital expenditure Rs. 1,43,353 were expended in the Eastern Nára district, chiefly on clearance of Nára between Jatri and Ketí, construction of Jatri sluice and bunds, shifting the spoil and constructing iron bridges on the Mitráo, and the balance was utilised on commencing the improvements and extension of the Unharwáh in the Begári district. The revenue expenditure was in connection with the new mouth to the Desert Canal.

On Minor Works the capital expenditure was wholly incurred on regulators and inspection bungalows in the Fuleli district and Rs. 21,924 were debited to Revenue for works on the Great Marak and Fuleli. On Works for which only revenue accounts are kept the outlay of the year amounted to Rs. 1,40,416 or Rs. 16,604 more than in previous year. The principal works on which the expenditure was incurred were the new feeder to Western Nára, the Pritchard Canal, the Dhamrao Canal, the Baghiar embankments and small improvements to the Dadwah. Under the head Agricultural the outlay was small and chiefly on embankments in the Western Nára district.

The total expenditure under all heads including establishment and tools and plant amounted to Rs. 5,76,827 exceeding that of the previous year and of the average by Rs. 1,13,382 and Rs. 1,23,133 respectively. The works on which this outlay was incurred were described in the Administration Report, and it is not necessary to give more than a detailed list of them as follows:—

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
1	2	3	4	5	
		MAJOR WORKS.		Rs.	1
		49—CAPITAL EXPENDITURE NOT CHARGED AGAINST REVENUE.			
		<i>Desert Canal.</i>			
1	Begári Canal Division.	Culvert under Ahmed Rajwah ex. Desert Canal.	To improve supply ...	1,990	
		<i>Unharwah.</i>			
2	Do.	Extension of Nasirwah ex. Unharwah.	To increase supply and cultivation.	15,816	
		<i>Nára Canal.</i>			
			Total, Begári Canals District ...	17,806	
3	Eastern Nára District.	Masonry sluice, Jatri bund ...	To regulate supply ...	26,217	
4	Do.	Deepening and enlarging Nára from head of Jatri Channel to Ketí.	To improve supply ...	40,975	
5	Do.	Restoring bund across Jatri channel.		5,433	
6	Do.	Flank embankment, Jatri sluice. Strengthening and raising the Bedi bund.	To prevent breaches and to afford protection against flood.	842	
7	Do.	Bunds, Jatri to Ketí ...		7,240	
8	Do.	Bund from Bakhora to Bakar ...		14,262	
		<i>Mithrao Canal.</i>			
			Total, Nára ...	94,969	
9	Do.	Addition and alteration to Regulator, 30th mile.	To provide increased waterway	45	
10	Do.	Iron and masonry bridge, 14th mile.	To replace old wooden trestle bridges.	6,194	
11	Do.	Do. 20th "		7,246	
12	Do.	Do. 28th "		—24	
13	Do.	Do. 33rd "		64	
14	Do.	Do. 37th "		1,497	
15	Do.	Do. 40th "		3,082	
16	Do.	Demolishing bridge at 12th "		200	
17	Do.	Do. 18th "		200	
18	Do.	Do. 24th "		139	
19	Do.	Providing 2 ferry boats ...	For people to ferry across ...	554	
20	Do.	Bungalow and out-houses, Samara	To accommodate officers on inspection duty.	196	
21	Do.	Shifting bank ...	To save berms being carried away by current.	31,695	
22	Do.	Masonry heads to Karias ...	.....	—184	
		<i>Thar Canal.</i>			
			Total Mithrao ...	49,104	
23	Do.	Masonry Karia heads, Umankot branch.	.....	—120	
24	Do.	Masonry Karia heads, Thar Canal.	.....	—425	
25	Do.	Masonry heads to Chor branch.	.....	—175	
				—720	
			Total, Eastern Nára ...	1,43,353	
			Total 49 ...	...	1,61,15

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
	1	2	3	4	5
		MAJOR WORKS—continued.		Rs.	Rs.
		42—WORKING EXPENSES.			
		EXTENSION AND IMPROVEMENTS.			
		<i>Desert Canal.</i>			
26	Begári Canals District.	Excavating new mouth ...	To ensure full supply of water in canal, the river having changed its course.	15,040	
27	Do.	Escape sluice and channel ...		12,513	
		Total, Begári Canals District ...		27,553	
		<i>Mitrao Canal.</i>			
28	Eastern Nára Canals.	Additions and alterations to Regulator, 30th mile.	These are amounts chargeable to Revenue Accounts, the difference to Capital as noted above.	1,700	
29	Do.	Iron and masonry bridge, 14th mile.		1,631	
30	Do.	Do. 20th "		1,441	
31	Do.	Do. 33rd "		1,303	
32	Do.	Do. 37th "		1,280	
33	Do.	Do. 40th "		1,474	
		Total, Eastern Nára District...		8,829	
		Total 42 ...		...	36,382
		Total, Major Works ...		...	1,97,541
		MINOR WORKS.			
		43—WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.			
		<i>Capital Account.</i>			
		<i>Fuleli Canal.</i>			
34	Fuleli Canals District.	Regulator over old Fuleli at Nareja.	To control supply and protect cultivation.	15,535	
35	Do.	Regulator over Fuleli at Alipur.	To control supply in Dehro Mohbat, Tando Bāgo and Guni talukas.	33,160	
36	Do.	Inspection Chaakis ...	For accommodation of officers and subordinates.	13,725	
37	Do.	Enlarging and extending tails of 5 of the principal branches of the Fuleli.	To improve supply ...	4,972	
				67,392	
		REVENUE ACCOUNT.			
		<i>Sukkur Canal.</i>			
38	Ghár Canals	New garden at Urzi Buto ...	To grow vegetable, &c., and to serve as nursery.	100	

Item.	District.	Name of Work.	Object of Work.	Amount.	Total.
	1	2	3	4	5
		MINOR WORKS—continued. REVENUE ACCOUNT—continued. <i>Ghár Canal.</i>		Rs.	Rs.
39	Ghár Canals	Bridge on Hirawah at 5-5th mile.	For better communication ... To replace old one carried away by floods.	1,717	
40	Do.	Do. do. 9-7th ...		246	
41	Do.	Do. Mirwah No. 1 ...		36	
42	Do.	Sluice over Zamiudári Karia Nawazali Shahani ex. Nasrat.		163	
				2,162	
			Total, Ghár District ...	2,262	
		<i>Marak.</i>			
43	Hyderabad Canals	Removing curve from Gharo Rano and new mouth to Lohano.	To improve supply ...	7,847	
44	Do.	Bund Sarfraz along first 5 miles on right bank.	To prevent excessive deposit of silt.	454	
			Total, Hyderabad Canals ...	8,301	
		<i>Fuleli.</i>			
45	Fuleli Canals	New head to Kamalwah and Jamwah and Regulator.	To improve supply at tail.	11,361	
46	Do.	Regulator over Wadhuwah ...	To control supply and prevent flooding at tail.		
47	Do.	Bund from Jamshora to Gidu ...	To prevent flooding.		
48	Do.	Garden at Talhar ...	For vegetable and young plant.		
49	Do.	Gardens at Triple sluice ...	Do. do.		
			Total, Fuleli Canals District ...	11,361	
			Total, Revenue Account ...	21,924	
			Total, Works for which Capital and Revenue Accounts are kept.		89,316
		WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.			
		REVENUE.			
		<i>Rohri Canals.</i>			
50	Shikárpur Canals	Masonry heads to Karias ex. Koraiwah.	To regulate supply ...	490	
51	Do.	Garang Rajib and Chitiwahs ...	Advertisement charges ...	81	
				571	

Item.*	District.	Name of Work.	Object of Work.	Amount.	-Total.
	1	2	3	4	5
		WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.		Rs.	Rs.
		REVENUE—continued.			
		Western Nára.			
52	Western Nára	Pritchard Canal ...	To increase supply and cul- tivation.	15,750	
53		New feeder, Western Nára ...		70,050	
54		Dhamiao Canal ...		19,612	
55		Lohri Dhora feeder ...		3,078	
56		Garden on Western Nára ...		203	
		Upper Nurwah.			
57		Addition to road bridge ...	.....	457	
				1,09,150	
58	Hyderabad Canals.	Widening and extending Mir- wah ex. Dad.	To improve supply and ex- tend cultivation.	7,384	
59		Survey Nasrat ...		852	
60		Do. Naolakhi ...		448	
61		Do. Dadwah ...		953	
				9,637	
62	Karachi Canals.	Restoration, Baghiar Embank- ment.	To prevent overflow ...	8,689	
63		Chandans in Shahbandar	For drainage of swamps ...	4,860	
64		Pinyari Canal.	To prevent breaches and protect cultivation.	3,502	
65		Bund connecting Jurar and Khadi-Left Bank bunds.		3,657	
66		Baragazo Kadi Bund-Left Bank bund.		350	
		Extension, Hilaya Bund ...		21,058	
			Total, Works for which only Revenue Accounts are kept.	...	1,40,416
		Agricultural Works.			
67	Shikarpur District.	Loop 7th mile Káshmor Bund...	To regulate supply ...	5,000	
68		Indus flood survey ...		793	
69	Ghar Canals	Shuice over Sidhwah—Ghar Bund.		1,474	
70	Western Nára Dis- trict.	Improving and extending Nára bund.		15,022	
71	Eastern Nára	Jamrao Canal survey ...		1,428	
				23,717	
			Total, under all works ...	...	4,50,990

27. The regular establishment charges of the department for the year and for the preceding one are shown in the following statement :—

STATEMENT G—4.

Districts.	CAPITAL EXPENDITURE.									
	1891-92.					1892-93.				
	Establishment Charges.					Establishment.				
	Outlay.	Executive.	Percent- age.	Direction.	Percent- age.	Outlay.	Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals District ...	8,232	486	15	162	5	17,506	2,561	29	890	5
Shikarpur Canals " ...	...	...	...	...	...	...	...	...	...	...
Ghar Canals " ...	...	...	...	...	...	...	...	...	...	...
Western Nara " ...	...	...	...	...	...	...	...	...	...	...
Eastern Nara " ...	67,467	13,493	20	2,373	6	1,43,753	28,671	20	7,169	5
Hyderabad Canals " ...	...	...	...	...	...	...	...	...	...	...
Fuelli Canals " ...	36,162	5,363	14.9	1,783	4.9	67,392	10,169	15	3,370	5
Karachi Canals " ...	...	...	...	...	...	...	...	...	...	...
Total ...	1,06,801	19,341	...	5,323	...	2,25,551	42,341	...	11,425	...

District.	REVENUE AND AGRICULTURAL EXPENDITURE.									
	1891-92.					1892-93.				
	Establishment Charges.					Establishment.				
	Outlay.	Executive.	Percent- age.	Direction.	Percent- age.	Outlay.	Executive.	Percent- age.	Direction.	Percent- age.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Begari Canals District ...	1,37,544	45,321	28.8	7,369	4.6	1,53,879	41,323	27.4	6,555	4.3
Shikarpur Canals " ...	1,37,740	22,741	16.5	6,642	4.8	99,030	23,933	24.3	3,397	4.4
Ghar Canals " ...	1,07,030	26,479	24.7	4,883	4.7	1,09,214	26,838	24.6	4,673	4.2
Western Nara " ...	1,73,911	26,261	15.1	8,102	4.7	2,16,639	31,075	14.3	9,130	4.2
Eastern Nara " ...	35,705	16,234	27.1	2,726	4.7	97,727	6,996	7.2	4,033	4.1
Hyderabad Canals " ...	2,32,185	47,739	20.4	10,739	4.6	1,76,375	53,573	30.4	7,248	4.1
Fuelli Canals " ...	1,51,060	30,439	16.8	8,389	4.6	1,45,561	24,924	18.7	7,969	4.1
Karachi Canals " ...	2,05,851	43,161	21.2	9,547	4.6	1,74,229	45,450	26	7,155	4.1
Total ...	12,53,996	2,58,268	...	59,376	...	12,02,654	2,65,891	...	56,273	...

* Exclusive of Refunds ... 1
† Do. do. ... 2,829

The charges under all heads are compared below :—

						1891-92.	1892-93.
						Rs.	Rs.
Executive ...	...	...	...	...	...	2,77,603	3,08,232
<i>Direction.</i>							
Superintending Engineer's office in Sind	...	...	...	...	...	29,346	25,507
Secretariat and Accounts	...	...	...	...	...	34,353	36,194
Total ...	...	...	...	...	...	3,41,308	3,69,933
Increase ...	...	...	...	...	...	Rs. 28,625	

The increase of Rs. 28,625 is detailed as under :—

		Rs.
Increase on Executive Establishment	...	30,623
Do. Secretariat and Accounts	...	1,841

Decrease on Superintending Engineer's Establishment.	...	32,464
	...	3,839

Net ... 28,625

The increase on executive establishment charges for 1892-93 over those of the previous year is due to increased charges on almost all heads of establishment and specially on those of engineering for officers engaged on special surveys.

The increase on the charges on account of Secretariat and Accounts is owing to more expenditure on irrigation works in 1892-93 than in the preceding year.

The large decrease in the Superintending Engineer's Establishment charges is attributable to the heavy expenditure in the Hyderabad Buildings Provincial District.

28. The following statement shews the percentage of expenditure on revenue and the cost of maintenance per acre :—

STATEMENT H (*vide* TABLES III—A AND IV.)

Years.	Cultivation.	Total Canal Revenue assessed, including miscellaneous.	EXPENDITURE.			Percentage of Revenue.	Cost of maintenance per Acre.
			Maintenance and Repairs.	Cost of Revenue collection.	Total.		
1	2	3	4	5	6	7	8
	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1886-87 ...	1,814,650	37,72,985	13,99,852	3,29,394	14,29,246	37.83	0.80
1887-88 ...	1,371,144	38,78,084	13,02,617	3,42,170	16,44,787	42.4	0.88
1888-89 ...	2,118,635	44,69,436	11,81,720	3,91,630	15,73,350	35.2	0.74
1889-90 ...	2,349,819	47,91,745	12,14,558	4,23,904	16,38,462	34.19	0.69
1890-91 ...	2,203,423	47,04,310	12,22,074	4,22,001	16,44,075	34.93	0.65
1891-92 ...	2,165,631	46,83,898	12,45,340	4,24,358	16,69,698	36.65	0.77
Average ...	2,037,220	43,84,241	12,11,027	3,88,943	15,99,970	36.86	0.76
1892-93 ...	2,399,065	50,82,177	12,36,384	5,03,561	17,39,945	34.22	0.72

Rs.

49,08,000 Government. } Assessment,
1,09,291 Jaghir and foreign.
64,856 Actual—Miscellaneous.

50,82,177

Both the percentage of expenditure on revenue and the cost of maintenance per acre compare very favourably with the averages and those of the previous year notwithstanding the large increase on the cost of revenue collection.

29. In the following statement are shown the financial results of all irrigation works in the province :—

STATEMENT I (*vide* GENERAL ABSTRACT OF FINANCIAL RESULTS AND STATEMENT I-C PREPARED BY EXAMINER, PUBLIC WORKS ACCOUNTS).

Class of Works.	Gross Revenue.	Deduct share due to old irrigation.	Total Revenue due to the Government.	Gross Working Expenses.	Deduct old maintenance charges.	Total Working Expenses on improvement.	Net Revenue.	Simple Interest.	Net Profit.
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Major Works ...	10,41,871	—37,087	10,24,814	3,54,329	—9,103	3,45,226	6,79,589	3,33,522	3,39,766
Minor Works Capital ...	17,64,953	—57,494	11,71,441	5,97,933	—1,96,743	3,91,190	7,80,700	...	7,80,700
	28,06,824	—94,581	27,09,259	9,42,262	—2,06,345	7,35,917	18,03,328	3,30,822	21,25,216
Minor Works Revenue ...	22,77,273	...	22,77,273	9,54,328	...	9,54,328	13,22,945	...	13,22,945
Minor Works for which neither Capital nor Revenue Accounts are kept ...	6,546	+ 6,74,551	6,81,097	1,54,957	+ 2,05,245	3,60,232	2,70,265	...	2,70,265
1892-93 ...	41,30,625	...	51,80,625	20,42,377	...	20,42,377	50,81,348	3,39,822	27,31,426
1891-92 ...	46,77,825	...	46,77,825	20,22,573	...	20,22,573	26,55,802	3,33,985	23,21,817
	+ 1,32,750	...	+ 1,32,750	+ 26,801	...	+ 26,801	+ 1,05,966	+ 5,837	+ 4,00,109

Note.—This statement has been prepared from Examiner's figures; the sum of Rs. 40,61,871, shown against Major Works, appears to include the sum of Rs. 51,312 noticed in Statement C. If the Examiner's figures are wrong then the Revenue will be so much less.

Owing to revised adjustment of old revenue and expenditure ordered by Government of India it has been necessary to change the form of this statement and to include Agricultural works; the figures now given cannot therefore be compared with those in Statement I of previous report.

The net profit from Major Works amounted to Rs. 3,39,766, showing a large increase over the return of previous year due chiefly to improved working of Desert Canal, but also to better returns from all Major Works. There is also a very satisfactory increase from Minor Works revenue. Compared with similar return for previous year, there is a net increase of Rs. 4,00,109 as shown in the following abstract, which is satisfactory:—

		Major Works.	Minor Works Capital.	Minor Works Revenue.	Agricultural.
		Rs.	Rs.	Rs.	Rs.
1892-93 ...	...	339,766	785,750	13,25,145	2,70,765
1891-92 ...	...	59,634	790,782	11,99,004	2,71,897
		+ 280,132	— 5,032	+ 1,26,141	— 1,132
Increase...	...	...	...	Rs. 4,00,109*	...

*See note on Statement I.

30. The following statement shows the financial results of the four Major and seven Minor capital works in Sind:—

STATEMENT I—1 (*vide* EXAMINER'S STATEMENT I-C.)

	Capital Outlay to end of 1892-93.	GROSS REVENUE.								WORKING EXPENSES.					NET REVENUE.		Percent- age of Revenue on Capital outlay, 1892-93.	Percent- age of Revenue on Capital outlay, 1891-92.	
		Irrigation.		Planta- tions and Miscel- laneous Receipts.	Total.	Less Refunds of Reve- nue.	Gross Revenue.	Deduct share due to old Irriga- tion.	Total Revenue due to Im- prove- ments.	Direct.	In- direct.	Total.	Deduct old main- tenance charges.	Total Working Expenses due to Improve- ment.	Total.	Due to Im- prove- ments.			
		Government Land.	Jāghir Lands in Sind and Kelat.													16			17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Productive Works.																			
Desert Canal ...	12,64,048	99,594	28,410	312	1,28,316	43	1,28,274	...	1,28,274	1,04,077	3,364	1,07,441	...	1,07,441	20,833	20,833	1.6	...	
Unharwah ...	5,59,452	47,362	...	3	47,363	...	47,362	...	47,362	15,332	347	15,679	...	15,679	31,693	31,693	8.41	-1.78	
Begāri ...	16,73,079	3,78,358	28,610	1,000	4,07,965	5,637	4,02,328	33,613	3,68,813	79,714	1,398	81,310	8,789	72,531	3,21,118	2,36,294	17.71	10.25	
Eastern Works ...	55,92,117	4,63,599	2,086	18,185	4,83,820	43	4,83,807	3,444	4,80,368	1,49,170	729	1,49,899	344	1,49,555	3,33,908	3,30,808	5.93	5.68	
Total ...	88,88,696	9,88,910	59,106	10,489	10,67,495	5,625	10,61,871	37,057	10,24,814	3,48,293	6,056	3,54,329	9,103	3,45,226	7,07,542	6,79,588	7.65	4.06	
MINOR WORKS, AND NAVIGATION CAPITAL.																			
Sukkur Canal ...	13,88,713	2,15,833	1,061	1,307	2,18,291	4,221	2,13,999	84,890	1,29,174	54,433	1,692	51,525	13,362	42,163	1,58,455	87,811	6.32	7.46	
Ghar Canal ...	4,40,977	7,33,042	3,438	6,312	7,43,792	34	7,42,758	1,35,512	6,07,246	1,71,076	3,238	1,74,314	18,441	1,55,473	5,08,444	4,51,773	102.45	102.49	
Mehrabwah ...	72,010	20,498	...	10	20,829	...	20,588	26,879	5,391	6,814	165	6,979	7,186	...	13,909	5,794	8.93	16.73	
Alibhar Kacheri ...	23,917	30,112	462	40	30,515	21	30,391	17,595	3,099	6,536	157	6,693	9,266	2,733	19,901	5,662	23.97	4.25	
Marak ...	2,01,533	1,17,037	2,363	340	1,19,890	25	1,19,777	55,437	60,840	56,471	1,599	57,960	23,495	34,552	61,797	25,763	12.78	7.48	
Sarfrāz ...	1,24,689	42,840	1,405	313	44,558	49	44,509	18,892	25,703	21,470	593	22,063	7,821	14,242	22,446	11,461	8.19	3.3	
Fuleli Canal ...	12,39,510	5,77,893	24,084	3,463	6,65,442	5,013	6,62,427	2,14,343	4,57,880	2,59,217	5,162	2,64,379	1,16,361	1,48,018	3,38,050	2,09,892	17.05	18.91	
Total ...	34,82,390	17,27,538	24,814	11,895	17,72,397	7,362	17,64,935	5,87,494	11,77,441	3,76,917	11,916	3,87,933	1,96,242	3,91,691	11,77,002	7,85,750	22.56	29.78	
Total for both ...	1,23,71,096	27,16,498	91,920	31,375	28,39,793	12,987	28,36,806	6,21,551	22,02,255	9,24,310	17,332	9,42,262	2,05,345	7,76,917	18,44,544	14,65,338	11.84	9.94	
Total for 1891-92 ...	1,20,75,040	24,01,241	61,180	34,857	24,97,278	...	24,67,278	4,03,007	20,94,271	8,72,134	21,587	8,93,671	...	8,93,671	16,03,607	15,00,600	9.94	...	

Note.—The figures in Column 3 include 4 per cent., on $\frac{10}{100}$ of the proceeds from sale of occupancy rights.

* *vide* Note on Statement I.

The deficits of the previous year on the Desert and Unharwah canals have been converted into profits, and the returns from the Begāri are very good. The Eastern Nāra also gave a fair return. The net revenue from Major works has increased by 2.97 per cent.

Under Minor works the Alibhar Kacheri, Marak and Sarfrāz give good returns. The Ghar shows little change, while there is a falling off in the returns from Sukkur and Fuleli canals. The Mehrab alone shows a deficit due to deduction for the first time of revenue before improvements.

31. The following statement shows the area irrigated by Major and Minor works (capital) in Sind compared with original forecasts:—

STATEMENT J (*vide* TABLE III).

Canals.	Area irrigable by complete project.	AREA IRRIGATED DURING		Excess area irrigated, columns 2 and 4.
		1891-92.	1892-93.	
1	2	3	4	5
	Acres.	Acres.	Acres.	Acres.
<i>Major Works.</i>				
Desert Canal ...	112,000	60,130	95,156	—16,844
Unharwah ...	43,000	19,283	23,277	—19,723
Begāri Canals ...	186,500	174,719	192,779	+6,279
Eastern Nāra ...	543,400	211,951	243,412	—299,988
Total ...	884,900	466,083	5,54,624	—330,276
<i>Minor Works—Capital.</i>				
Sukkur Canal ...	90,000	89,343	89,121	—879
Ghār Canals ...	250,000	239,369	256,155	+6,155
Fuleli ...	360,000	324,935	331,974	—28,026
Mehrabwah ...	25,000	13,367	11,251	—13,749
Alibhar Kacheri ...	14,000	10,822	10,972	—3,028
Marak ...	65,000	54,111	58,786	—6,214
Sarfrāz ...	35,000	27,124	29,770	—5,230
Total ...	839,000	759,071	788,023	—50,971

The figures in column 2 of this statement have been changed to agree with development of the projects, and those under Eastern Nāra include the Jamrao Canal. There is a very small falling off in the Sukkur Canal, but with this exception all the canals, except Mehrab, have made satisfactory advances which give fair hope of their ultimately reaching full limit. Compared with last year's the results are encouraging.

32. In last year's report the mileage of canals was not completely divided between main and branch canals. The total mileage of canals has increased by 20 and of embankments by 2. The increase in length of canals is due to resumption of the Karowah in Karachi, the taking over of the Mitnahwah in the Fuleli and addition of two miles to the Desert Canal in the Begāri District. In the Eastern Nāra District 13 miles have been added to bunds by construction of Bakar Bakhora Bund, the Hilyah Bund was extended for three miles in Karachi, and the net increase of two miles only is on account of deduction in length in Western Nāra for portion of embankment eroded. The length of canals and bunds in each district is given below :—

District.	LENGTH IN MILES OF			
	Canals.			River Embank- ment.
	Main Canal.	Branches.	Total.	
1	2	3	4	5
Begāri Canals District ...	187	248	435	48
Shikārpur Canals District ...	272	54	326	84
Ghār Canals District ...	120	308	428	43
Western Nāra District ...	274	240	514	65
Eastern Nāra District ...	175	103	278	254
Hyderabad Canals District ...	492	1,138	1,630	1
Fuleli Canals District ...	172	979	1,151	12
Karachi Canals District ...	539	587	1,126	154
Total ...	2,231 2,804	3,657 3,064	5,888 5,868	661 659
	—573	+593	+20	+2

33. The following statement shows the area of the principal crops irrigated in each district on Government land and the percentages of kharif and rabi and of lift and flow :-

		NAMES OF CANAL DISTRICT.								Total	
		Begari Canals District.	Shikarpur Canals District.	Ghár Canals District.	Western Nára District.	Eastern Nára District.	Hyderabad Canals District.	Fuleli Canals District.	Karachi Canals District.	Acres.	Ac. res.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
Kharif	Rice ...	8,283	26,980	150,189	59,500	92,532	1,343	131,296	123,024	592,456	
	Jowári ...	109,633	76,250	70,017	91,717	2,059	1,857	4,974	2,476	431,093	
	Bajri ...	36,425	4,394	3,943	9,024	62,333	1,913	91,541	28,118	457,933	
	Cotton ...	392	694	121	203	14,238	27,297	11,323	49	55,947	
	Other crops ...	40,772	4,810	14,058	3,352	10,497	32,349	9,219	5,995	127,823	
Total, Kharif		195,565	113,407	238,359	164,096	181,459	383,761	248,553	158,592	1,634,002	
Rabi	Wheat ...	11,357	66,791	65,192	80,798	34,447	23,679	17,541	9,164	391,569	
	Barley ...	125	211	253	523	208	3,968	11,021	11,021	27,124	
	Oil-seeds ...	36,531	5,434	24,131	40,420	17,171	22,208	18,274	13,611	172,539	
	Other crops ...	10,214	4,758	1,525	24,642	17,000	5,589	13,506	17,055	97,345	
	Total, Rabi	58,287	75,194	97,100	150,491	64,496	55,190	52,287	43,831	596,566	
Total, Kharif and Rabi		253,852	188,601	335,459	314,587	245,945	388,951	301,140	202,423	2,230,558	

		Kharif.			Rabi.			Total.			Kharif.			Rabi.			Total.		
		Acres.	Flow.	Lift.	Acres.	Flow.	Lift.	Acres.	Flow.	Lift.	Acres.	Flow.	Lift.	Acres.	Flow.	Lift.	Acres.	Flow.	Lift.
Percentage	1888-89	89	11	100	81	19	100	84	16	100	84	16	100	77	23	100	95	5	100
	1889-90	94	6	100	84	16	100	76	24	100	74	26	100	61	39	100	92	8	100
	1890-91	94	11	100	77	23	100	75	25	100	71	29	100	69	31	100	82	18	100
	1891-92	67	33	100	69	31	100	66	34	100	62	38	100	81	19	100	85	15	100
	1892-93	77	23	100	60	40	100	71	29	100	52	48	100	73	27	100	80	20	100
Percentage	1888-89	12	88	100	36	64	100	8	92	100	21	79	100	15	85	100	88	12	100
	1889-90	13	87	100	22	78	100	7	93	100	19	81	100	17	83	100	89	11	100
	1890-91	14	86	100	18	82	100	5	95	100	26	74	100	33	67	100	89	11	100
	1891-92	11	89	100	16	84	100	6	94	100	25	75	100	24	76	100	86	14	100
	1892-93	9	91	100	17	83	100	6	94	100	25	75	100	31	70	100	81	19	100

The kharif is the chief crop grown in Sind, being for this year 73 per cent. of the whole cultivation. In the Ghár, Fuleli and Karachi districts rice is the staple crop, while jowári and bajri are chiefly grown in the other districts. More than half the cotton is grown in Hyderabad District and a fair area in Eastern Nára and Fuleli.

In the Hyderabad District $\frac{1}{4}$ th of the kharif crop is irrigated by lift and in all other districts the large proportion is watered by flow.

The area under each crop on Government land is given for the last five years in the following statement :-

		1888-89.			1889-90.			1890-91.		
Crops.		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Kharif	Rice ...	86	551,720	551,806	236	594,508	594,744	131	639,939	640,070
	Jowári ...	184,039	306,686	490,725	190,029	311,432	501,461	153,182	246,033	401,215
	Bajri ...	236,151	67,497	293,648	259,051	75,969	335,020	275,277	61,622	335,899
	Cotton ...	69,502	5,223	74,725	69,983	10,472	80,455	71,096	15,372	86,468
	Other crops ...	71,273	173,149	244,422	61,358	106,035	167,393	64,156	67,152	131,308
Total		542,311	1,107,375	1,649,686	583,594	1,138,436	1,722,630	558,842	1,035,118	1,593,960
Rabi	Wheat ...	26,735	107,375	134,110	31,155	147,681	188,836	89,341	145,236	235,577
	Barley ...	903	7,113	8,016	1,647	19,843	21,490	2,149	10,149	12,298
	Oil-seeds ...	7,794	57,026	64,820	10,948	129,365	140,313	67,573	89,538	156,855
	Other crops ...	5,472	33,245	38,717	6,615	47,002	53,617	4,960	54,970	59,930
	Total	40,944	198,359	239,302	53,365	280,149	389,511	53,275	302,192	355,467
Grand Total		583,255	1,305,734	1,888,988	636,959	1,418,585	2,112,141	612,117	1,337,310	1,949,427

		1891-92.			Average.			1892-93.		
Crops.		Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Kharif	Rice ...	268	639,224	639,492	180	601,559	601,739	76	592,830	592,906
	Jowári ...	189,730	306,117	495,847	171,995	275,922	447,917	169,698	261,460	431,158
	Bajri ...	261,519	67,427	328,946	255,459	75,969	331,428	275,277	61,622	335,899
	Cotton ...	67,051	15,447	82,498	67,218	12,304	79,522	67,116	13,611	80,727
	Other crops ...	59,010	78,326	137,336	62,199	101,165	163,364	51,172	78,651	131,823
Total		548,578	966,991	1,515,569	557,081	1,061,473	1,618,554	585,434	1,048,658	1,534,092
Rabi	Wheat ...	49,838	121,332	171,170	47,530	153,791	201,321	47,493	254,534	302,027
	Barley ...	1,841	14,020	15,861	1,649	13,153	14,802	1,348	20,379	21,727
	Oil-seeds ...	8,013	112,537	120,550	8,375	96,997	105,372	17,563	163,267	180,830
	Other crops ...	4,204	49,392	53,596	5,321	46,152	51,474	7,397	59,456	66,853
	Total	63,536	297,321	360,857	62,775	209,765	261,530	72,743	533,123	595,860
Grand Total		612,114	1,264,312	1,876,426	619,856	1,271,238	1,880,084	658,177	1,581,781	2,130,952

There is a falling off in the area under rice and a large increase in that of jowári and bájri, especially of the latter. The cotton crop shows a serious falling off. All these results are due to the late rise of the river which was unfavourable for rice and cotton; but the good supply at the end of the season gave a large crop of jowári and especially of bájri which can be sown late and does not require so much water.

In the rabi crop the area under wheat shows a steady increase, but that under oil-seeds a very large one, most probably due to the excellent price obtained for this crop.

The following statement shows the area of different crops on all land :—

GOVERNMENT LAND.				JÁGHIR AND FOREIGN LANDS.			FOR BOTH.					
				1891-92.	1892-93.	Difference.	1891-92.	1892-93.	Difference.			
				Acres.	Acres.	Acres.	Acres.	Acres.	Acres.			
Kharif	Rice	...	...	639,492	592,456	-47,036	33,468	38,570	+5,102	633,960	631,026	-22,934
	Jowari	...	...	367,847	431,103	+63,256	53,093	69,414	+16,321	421,450	500,517	+79,067
	Bajri	...	...	395,756	497,063	+121,307	47,060	58,053	+10,993	353,416	485,116	+131,700
	Cotton	...	...	83,098	55,647	-27,451	11,974	7,129	-4,845	94,074	52,767	-41,307
	Other crops	...	...	137,316	157,324	+20,008	30,581	16,843	-13,738	167,927	144,471	-23,456
	Total, Kharif	...	...	1,513,539	1,634,092	+120,553	177,289	189,905	+12,617	1,690,827	1,823,697	+132,870
Rabi	Wheat	...	...	2,71,670	301,969	+30,299	16,774	17,369	+5,407	288,446	314,338	+25,892
	Barley	...	...	15,541	21,724	+6,183	3,421	1,499	-1,922	17,965	23,213	+5,248
	Oil-seeds	...	...	1,29,550	175,830	+46,280	15,327	13,213	-2,114	135,777	189,043	+53,266
	Other crops	...	...	63,596	97,343	+33,747	4,199	14,230	+10,031	67,796	111,563	+43,767
	Total, Rabi	...	...	4,61,357	596,866	+135,509	39,626	41,391	+2,065	499,963	638,157	+138,174
Grand Total, Kharif and Rabi,				1,974,896	2,230,958	+256,062	216,914	231,296	+14,382	2,190,810	2,462,054	+271,244
* Made up of regular cultivation										1,949,717		
Dubázi cultivation										25,179		
										1,974,896		
† Made up of regular cultivation										2,167,732		
Dubázi										61,349		
Unauthorized...										1,927		
										2,230,938		

Under Kharif the increase in jowári and bájri is maintained and there is an increase of 5,102 acres of rice in jaghirs.

There is an increase in all heads of rabi crop, especially in oil-seeds.

34. In Table I-E are given the discharges and duty of the more important canals. There are only three canals in Sind which have a separate rabi supply continued throughout the rabi season—the Sukkur, Mitrao and Thar canals. There is a falling off in the duty in the Begári Canals owing to elimination of rabi cultivation, which is not fairly due to average kharif supply, but is grown on the maximum supply as long as it lasts. The Eastern Nára Canals show improved results for kharif, but the rabi duty is very bad on Thar Canal owing to too constant supply and excess of rain water. In the Ghár, Hyderabad and Fuleki Canals the duty is less than that shown for last year, which included rabi cultivation. On the Sukkur Canal the duty is about normal and that for rabi has been shown for the first time separately.

35. Table II-E shows the incidence of working expenses and assessed revenue on canals. The irrigation share of net consolidated revenue has been taken as "occupier's and owner's" rate or indirect revenue, and hakábo on jágir and foreign cultivation as direct. The working expenses show a very considerable improvement under all heads on all the canals over last year's, but this is due in a great measure to more accurate preparation of the table, and next year the results of comparison will be more trustworthy.

36. Table III-E shows the area and approximate value of each kind of crop irrigated in Sind in 1892-93. The area includes cultivation on Government and jágir land, but not that irrigated in Kelat for which information regarding the value of the crop grown on the 63,574 acres of cultivation has not yet been received. The cultivation in Sind yielded crops of the estimated value of Rs. 4,51,38,421.

37. During the year under report the division was in charge of Mr. H. M. Thompson, and his thanks are due to all District officers named below, for their cordial help and self-denying exertions in carrying out his wishes:—

Mr. D. W. Herbert—Begári Canals.
 Mr. P. P. Chandanani—Shikárpur Canals.
 Mr. H. J. Landon—Ghár Canals.
 Mr. R. R. Menneer—Western Nára.
 Mr. T. W. de Winton—Eastern Nára.
 Mr. J. Young—Hyderabad Canals.
 Mr. T. Summers—Fuleli Canals.
 Mr. John Tate—Karáchi Canals.

EXECUTIVE DISTRICTS.

BEGÁRI CANALS DISTRICT.

1. This district is watered by three large canals, the Desert, the Unharwah and the Begári, and it is completely protected from river floods by the Káshmor bund. There are 435 miles of canals, of which 248 are branches of the main feeders, 187 miles long. Two miles were added to the length of the Desert Canal by the construction of a new mouth. The river embankment is 48 miles long. The area of the district is 2,514 square miles.

2. *Kashmor Bund.*—The inundation of 1892 following an unusually low one and coming after a long period of draught, severely tried this bund. When the river rose high and quickly in August, the water easily made its way through the parched ground, and in a few days 6 bad leaks occurred, most of them passing through the ground underneath the bund. With the greatest difficulty five of these leaks were closed, but one developed into a breach 200 feet wide just at the end of the 1st mile. This occurred on 11th August, and although some 3,000 men were collected all attempts to close the opening failed until the river fell, when water practically ceased to pass on 26th. As the breach only flowed for 15 days the water did not reach the Railway and did very little damage of any kind. Abkaláni establishments of the same strength as in previous two years were maintained, but owing to the late rise and early fall they were appointed later and dismissed somewhat earlier than usual. Ordinary repairs to the bund were carried out, but no work of any special importance was undertaken.

3. *Desert Canal.*—A new mouth leaving the river about 5 miles north of the old one was made for this canal before the inundation. It was opened on 10th May, or about a fortnight earlier than usual, to allow of fodder being grown for the cattle used for ploughing, &c., which had been well nigh starved owing to the failure of the canal and ravages of locusts in previous year. The new mouth worked very well giving more water than was required for some time, but it suffered from the passage across it of rain floods from the hills which reduced the supply in the end of the season.

4. *Begári Canal.*—Was opened on 10th May or 15 days before the usual time. Notwithstanding the low river in early part of the inundation the canal worked exceedingly well, giving a fair supply throughout the season. Up to the 67th mile the supply was excellent, but below that and in the Sir and Eden branches at the tail it was not so good owing to silt which had accumulated in the lower reaches and which it was not possible to remove before the inundation owing to great scarcity of labour. The deficiency here in the kharif season was, however, more than compensated for by the excellent *rabi* supply given up to the end of December, the canal flowing till the 31st of that month.

5. *Unharwah.*—This canal also worked very well, giving an average discharge of 646 cubic feet against 538 of previous year, and it would have given better results had not a bad breach occurred in 9th mile which necessitated the Head Regulator being closed for 6 days in August. Water flowed from 13th May to 5th October.

6. *General.*—Compared with the previous year this district was fortunate. The canals all worked well and gave sufficient water notwithstanding the late rise of the river.

The heaviest clearance was in the first 7 miles of Desert Canal which had been greatly silted in last year. All other canals were cleared as usual. The most important incident of the inundation was the breach in the 1st mile of the Kashmor Bund. This was the first since 1878, but it did little damage, flooding only 6 dols in Kashmor Taluka and giving a compensating rabi crop. Heavy rain fell in July and August when it was not wanted, but some showers in February helped the wheat and other rabi crops.

Opposite the new mouth of the Desert Canal the Indus receded to the east, leaving a good, dhand, which has unfortunately since deteriorated. Some 1,500 young tali trees were planted out along bunds and canals and a fair proportion survive. The area of cultivation was above the average.

7. The following statement shows the revenue collections and the charges for the year under review and four previous years :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	6,34,190	2,12,066	2,15,997	33.44	34.05
1889-90	5,67,007	2,12,959	2,52,634	37.55	62.19
1890-91	4,88,752	1,62,279	2,75,863	33.22	56.64
1891-92	3,34,127	1,59,820	2,15,543	47.63	73.49
1892-93	*5,84,217	2,11,521	2,59,236	36.21	44.87

* Examiner's figures, vide note on Statements C. & I. in general review.

The collections show considerable improvement. The maintenance charges are high owing to special expenditure on Desert Canal.

SHIKARPUR CANALS DISTRICT.

1. This district is divided by the river, the Rohri, Ghotki, Mirpur and Ubauro talukas being on the left, and Shikarpur, Sukkur and Nausharo on the right bank. The right bank is completely protected by the Sukkur-Begari bund 34 miles long; the left bank is open for 46 miles only, 11 miles north of Rohri being closed by the Kasimpur Bund.

There are also some inland bunds in Rohri, aggregating 39 miles in length which protect cultivation on a few canals from the floods to which this taluka is exposed. The only large canal is the Sindwah, which waters the greater portion of the Sukkur, Shikarpur and Nausharo talukas; its length is 43 miles with 47 miles of distributaries. In Rohri there are 229 miles of main canals with only one branch, 7 miles long. The area of the district is 5,424 square miles.

2. *Sukkur-Begari Bund*.—This bund, which closes the right bank from the Begari to Sukkur, was severely tested by the inundation of 1892. The water level against it was generally as high and in places higher than the previous maximum. There were only two leaks which were promptly discovered and closed by the Abkalani establishment. The bund was well watched and there were no breaches. The front slope of this bund has been gradually increased from 2 to 4 to 1, and the last 3 miles of this work were completed before the inundation. Erosion continued opposite the 33rd and 20th miles, but at the 10th mile was slight and decreasing.

3. *Sindwah*.—This important canal as usual worked well, giving a good supply throughout the season. The river cut into the dhand from which the Sind is fed some 10 miles above its mouth, but so far the effect has not been prejudicial, though more silt may soon be expected.

4. *Rohri Canals*.—Were all cleared and opened in good time. The Aror and Umarnas, which are out of the line of floods, worked satisfactorily, but all

the others were as usual in flood years badly damaged and of little use. The Rohri cultivators will not use canal water until all hope of floods has passed, but this year as the floods were late they began to plough for kharif late in July when rain fell which greatly helped them.

5. *Floods.*—With the exception of the Northern portion of the Ubauro and Mirpur talukas the whole of the Rohri sub-division was swept by floods from the river.

The six local floods all appeared, and later on the Bhawalpur flood entered the district, but in less volume than usual. The waters of all united and joined the Nāra supply channel at the usual place, and passing across it touched the hills which bound the Kháirpur State on the east, a limit which has been seldom reached before.

6. *General.*—On the whole the season was favourable for this district. On the right bank the canal supply was sufficient and fully utilized and on the left the floods were good though late, and the kharif was helped by rain which induced the men to commence ploughing. There were practically no remissions, and the area of cultivation was largely above the average.

7. The following statement shows the collections and charges for the year and for four preceding ones :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on maintenance and Revenue collection.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	3,60,796	1,16,525	1,36,486	32.30	37.82
1889-90	3,61,663	1,49,635	1,53,957	41.37	42.56
1890-91	3,49,135	1,31,322	1,46,458	37.62	41.95
1891-92	3,96,945	1,47,450	2,06,713	37.15	52.08
1892-93	5,07,890	1,62,878	1,67,046	32.07	32.89

There is a large increase in revenue of this district, chiefly from Rohri Canals. The increase in charges is due to consequent increase of cost of revenue collection.

GHAR CANALS DISTRICT.

1. This district is watered by the Sukkur and Ghár Canals; the former is 74 miles long with 58 miles of branch canals, and the latter 46 miles long has 250 miles of distributaries. The whole district is protected from river floods by the Ghár Bund 43 miles long and by 13 miles of high bank where no bund is yet required. The area is 1,912 square miles.

2. *Ghár Bund.*—The water rose higher than usual against many parts of this bund, but did not touch it till 17th July. Previous to the inundation some borrow pits close to back slope were filled in, and the front slope increased in places to 4 to 1. Two new sluices were made and ordinary repairs carried out. The usual Abkaláni establishments were maintained and there were no leaks or breaches. The bund is strong and in good repair and was not threatened by erosion during the season.

3. *Sukkur Canal.*—This canal is fed by two mouths, the old or Sukkur mouth, which takes off from the river just above the Sukkur pass, and the Rahuja mouth, 3 miles higher up, which takes its supply from a dhand. There are regulating sluices across both mouths, that on the Sukkur mouth has its sill 5' below zero of Bukkur gauge and is intended to give a rabi supply on the fall of the river. The canal gets its kharif supply during the rise from the Rahuja mouth which was opened on 16th June. At this date the river was too low to give full supply through Rahuja, and continuing to fall, the Sukkur

mouth was opened on the 29th with beneficial effect. Both mouths remained open till July 15th, when the river having reached a fair height, the Sukkur mouth was closed. For the remainder of the season the supply was above the average and maintained longer than usual, allowing a large area of land to be flooded for the rabi crop. In the latter part of the season there were 7 breaches, chiefly through unprotected heads of water courses. Transplantation of rice was somewhat delayed at first, but with this exception the canal worked well.

4. *Ghár Canal*.—This canal is also fed by two mouths, the original one and the Fordwah which joins it just above Lárkhána. There is no sluice on the old mouth, but supply through the Fordwah is regulated and under control. The Ghár was opened on 17th May or 16 days earlier than in last year, but the supply was deficient owing to the lowness of the river, and on 7th June the Fordwah was opened, giving a fair but not full supply till the river rose on 15th July. In August and September the supply was ample, but too late for much of the rice crop which, before withering, had been cut for fodder, and land again ploughed for jowári. The high level of the river in the latter part of the season allowed large area to be flooded and soaked for rabi. There were several breaches in banks of branch canals, but they were all closed before interfering with the supply and caused little if any damage not fully compensated for by late crop.

5. *General*.—There were no floods in this district, and the rainfall was more than usual. In July it was useful, but in August the river was so high that more water was not wanted, and men closing their water courses caused the canals to breach in many places. On the whole this district fared well, the area cultivated was above the average, there were no floods, a fair supply and few remissions.

6. The following statement shows the receipts in this district and charges against maintenance for the year and four preceding ones:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on maintenance and Revenue collection.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	7,88,065	1,82,135	2,65,146	23.12	33.65
1889-90	8,61,021	1,64,196	1,79,235	18.60	20.82
1890-91	9,22,526	2,22,778	2,59,385	24.15	28.12
1891-92	9,48,696	2,09,783	2,18,217	22.11	23.00
1892-93	9,56,775	2,33,008	2,42,170	24.33	25.31

The collections show a steady increase and the expenditure of the year was also larger than usual.

WESTERN NÁRA DISTRICT.

1. The Western Nára is the only important canal in this district, but in the south-east corner of it is situated the Manchar lake, a depression which ultimately receives all flood water from the river and from the hills above it; it is also fed and emptied by the Aral, a canal about 12 miles long, passing through the town of Sehwan. The area of this lake varies from 100 square miles, when ordinarily full, to 20, when well drained in the rabi season. There is thus a large area of well soaked land left ready for cultivation each year after the fall of the river, when every available acre of it is sown with wheat.

The Nára is a fine large canal 146 miles long with 235 miles of distributaries. There are a few small canals fed directly from the river, which brings the total canal mileage of the district up to 516. In 79 miles the river bank is

bunded, and there still remain 21 miles sufficiently high to need no embanking. This district is unfortunate in that it is exposed to floods from both sides, on the east from the river, and on the west from the hills, from which numerous ryces or water channels bring down large volumes of water when heavy rain falls. The area of the district is 2,500 square miles.

2. *Western Nára*.—Was opened on 7th April, and continued to flow till December. The low river in June and first half of July delayed rice sowing and transplantation, but afterwards up to 21st September the supply was ample and kharif crops on the main canal were excellent. The high land in the immediate vicinity of the canal was cultivated for the first time for many years, but the cultivation on branch canals was badly damaged by floods from the river and from the hills. The Akil dhand, from which the Nára receives its supply, remained in a favourable position, and the passage of clear flood water down the canal had a good effect in regulating the gradient by removing much silt. The supply in this canal can now be supplemented when necessary by two feeders, the Pritchard Canal and the new feeder. The Pritchard Canal has been unfortunate since its opening, owing to continued erosion of its mouth by the river which still advances and is now close to the head regulator. The canal was of great use in the early part of the season, but when the river rose in August the regulator was tightly closed. The new feeder was not ready and could not be opened till the 14th July; shortly after this it had to be closed, as the Nára could not carry all the water passed into it by its mouth by rain and by floods. The new feeder has been excavated only to $\frac{2}{3}$ of its proper width, the remaining third will be taken out when the Dhamrao Canal is completed. This canal was commenced before the inundation; it takes off from the right bank of Nára just opposite the new feeder and will carry 800 cubic feet per second to waste lands on the west.

3. *Manchar Lake*.—Floods from the heavy rain in the hills and from the river raised the level of water in the lake almost up to that of 1878. Its area before the river began to fall, and the Aral to reduce it, was roughly estimated at 200 square miles, or nearly double that of ordinary years. As this enormous volume of water had only one escape through the Aral to the river, that channel benefited greatly by the emptying scour, and the area exposed for cultivation was about double that of the previous year.

4. *Nára Bund*.—There were several breaches in this bund, but all were quickly closed except two, which, owing to the rush of water over sandy soil, could not be bunded till the river fell. The floods from these breaches joining water from a breach in the Nára near the new feeder flooded a large area of poor land on east of Nára and bursting through the railway joined the rain floods from hills on the west. They did little damage to cultivation; several of the weak places in this bund had been strengthened before the inundation, but for many years little had been done, as the river was far away, and it will be some time before the line is all brought to sufficient section.

5. *General*.—With the exception of the three northern talukas almost the whole of this district was under water for some time. The unprecedented heavy rainfall flooded a large area and floods from the hill ryces submerged the whole country south of Mehar, from the hills on the west to the Nára. For two years the river has been approaching this district, causing considerable increase of water against the Nára Bund, which except in a few places had been untouched for years. Considerable expenditure will be required to put the line in an efficient state, but the necessary works are being gradually undertaken as funds can be made available. The possible area of kharif was reduced by the low river at the beginning of the season, and a considerable proportion of that sown was afterwards flooded, but the rabi crop is large and good, and the flood water was of great use in clearing out the Nára and Aral. Remissions, as might be expected, are large, amounting to Rs. 86,752; they are mostly due to rain flood, and are almost all in the Karachi Collectorate. The rainfall was unusually heavy and responsible for most of the damage to canals, banks and cultivation in the district.

6. The following statement shows collections and charges for the year and four preceding ones:—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of maintenance and Revenue collection.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	6,01,676	1,51,317	1,77,728	25.14	29.54
1889-90	6,60,292	1,74,452	3,23,366	26.42	48.97
1890-91	6,07,244	1,56,657	3,66,798	25.79	60.40.
1891-92	6,92,021	1,51,147	2,77,718	21.84	40.13
1892-93	7,70,524	1,86,186	3,34,032	24.16	43.35

In this district also the collections are above the average. The expenditure is high, chiefly owing to repairing damage done by floods.

EASTERN NÁRA DISTRICT.

1. This district is watered by the Nára river, which receives its normal supply from the river through the Nára supply channel at Rohri. For the first 130 miles of its course the Nára passes through the Desert to the east of the Khairpur State, and cultivation does not commence till the Mitrao Canal is reached at Bakhora. There are 273 miles of canals in this district, and the cultivation on the Mitrao and Thar canals, the principal branches of the Nára, is protected from floods by bunds 93 and 33 miles long respectively. There are no river embankments, but the district is liable to floods which leaving the river in Rohri and Bháwalpur pass down the Nára river. The area of the district is 3,500 square miles.

2. *Eastern Nára.*—Water was admitted through the Nára supply channel on 1st May. Flood water from Rohri and Bháwalpur reached the 12th mile of Nára supply channel on 19th August, raising the gauge reading from 23 to 26 feet. Full supply level on this gauge is 22 feet, and the maximum reading of the flood of 1878 was 31' 2" and that of 1889 25' 7". The flood of 1892 did less damage than that of 1889, coming later and lasting for a shorter time. The new sluice across the Jamrao Sang was opened as long as water in the Nára was more than sufficient, and the water let through was used for rabi cultivation. The bunds closing the Adwáni and Sáo Nára, the two principal escapes of the Nára to the east between Jamrao and the head of the Mitrao, were severely tried, but safely withstood 11.20 feet of water or 1.2 feet more than they were supposed to retain. Several breaches occurred in the banks of the Nára below Bakar, and three more were made purposely to allow flood water to escape into dhands in the desert on the east. The bed of the Nára between Jatri and Ketí was cleared of all obstructions, and a cut 50 feet wide made across a bad bend, but owing to the flood the effect of this work thus partially completed could not be well seen. Lower down also, between Chandawahi and the Puran, the Nára was cleared of accumulations of drift sand and weeds, which work greatly facilitated the escape of surplus water to the sea.

3. *Mitrao Canal.*—Kharif supply reached the head of this canal on 12th May, but owing to the yearly increasing difficulty of filling the Makhi dhand from which it draws its water, full supply was not available till 18th July. From this on, the supply was ample, in fact it had to be reduced by cutting the Makhi bund which retains water in dhand and letting it escape down the unprotected area. The cutting of this bund is a dangerous necessity, as it has to be made up again in time to keep a sufficient rabi supply in the dhand. The necessity of filling the dhand and also of cutting the bund will disappear when the head of the Mitrao has been advanced into the Nára beside the Makhi weir, as lately proposed. The lower portion of the canal where water had of late years been somewhat deficient was thoroughly cleared, but the effect was not all

that could be wished, as the deficiency was not so much from want of clearance as from waste and unrestricted use of water in the upper reaches, which with no control over cultivation are difficult to deal with. The work of throwing back the spoil, made necessary by the gradual enlargement of the canal, was almost completed before the inundation. The kharif crop was helped by rain.

4. *Thar Canal*.—This canal was closed on the 8th November to allow of thorough clearance and extensive repairs required to masonry works on it. It was re-opened on 3rd June, and fed from supply stored in the Ketī dhand till 14th when river water first reached its head. The land on this canal is deteriorating from too constant supply, but arrangements have been approved by the Commissioner by which it will be closed longer than usual for some years, and if this does not answer, it is proposed to close it entirely every second or third year from November to June till the land recovers. Arrangements are also in progress for improving the drainage of the low lands about Umākot. The heavy rain of 1892 increased the growth of rank grass, thereby reducing the area available for rabi.

5. *General*.—The flood of 1892 was on the whole beneficial, and the rainfall which was greater than usual was also in most parts of the district of use to the kharif, and helped the people greatly by growing fodder on high lands where the grass is good and free from the obnoxious qualities which it has on the lower lands in this district. The minor canals worked well and silty water for the first time reached the Khīpra Canal in the early part of the season. This was due to the clearance between Jatri and Ketī, but the silt disappeared on the advent of the flood. Remissions were unimportant, the kharif crop was about the average and the rabi somewhat below. A new bund was made between Bakhora and Bakar across the head of the unprotected area, for the purpose of retaining the normal supply in the Nāra and preventing waste, and the construction of three iron and masonry bridges across the Mitrao was in progress. On the whole the district fared well throughout the season.

6. The financial results in this district and charges against revenue are shown in the following statement :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage of maintenance and Revenue collection.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	4,05,787	1,23,600	1,23,600	30.46	30.46
1889-90	4,98,950	1,29,132	1,31,557	25.88	26.36
1890-91	4,59,233	1,29,617	1,38,572	28.23	30.18
1891-92	4,38,459	1,22,660	1,28,034	27.98	29.20
1892-93	4,83,807	1,40,191	1,57,770	28.98	32.61

The revenue shows a fair improvement. The charges are high owing to special expenditure on clearing Nāra south of Tharwāh.

HYDERABAD CANALS DISTRICT.

1. This, the largest canal district in Sind, is watered by 492 miles of main canals with 1,138 miles of branches. The district is not subject to floods and there are no embankments; most of the cultivation is watered by the Persian wheel worked by bullocks or camels. The principal canals are the Nasrat, Naolaki, Dad, Great Marak, Gharo Mahmuda, Nasir and Sarfrāz. The area of the district is 5,660 square miles.

2. *Nasrat*.—Derives its supply from a branch of the river; it flowed for 4½ months from the 1st June. The canal has three branches; at first the supply

was poor and most of the branch canals stopped flowing for 3 weeks, but after the middle of July there were no complaints and the cultivation everywhere was well served.

3. *Naotaki*.—This canal has two mouths, one takes off direct from the river and the other from the same branch as the Nasrat. Water flowed on the 3rd June and a good supply, except for the first 5 weeks, was maintained for 5 months. Three of the branch canals whose beds are considerably higher than that of the main feeder ceased to flow when the river was low in June, but received sufficient water later on. There were several breaches during the height of the inundation, but they were of no consequence and were quickly closed.

4. *Dadwāh*.—This fine canal has its mouth now in a good dhand and it gave a good supply for $6\frac{1}{2}$ months to the 15 branch canals fed by it. There is at present great waste of water in the first 4 miles of the Dad where breaches are of constant occurrence owing to the section below not being large enough to carry on the water. The canal is capable of great improvement, for which a project is about to be submitted. Before the inundation the Mirwāh, a small branch, was improved and extended, bringing some 2,000 acres under cultivation in this season.

5. *Great Murak*.—This canal has also two mouths, both of which are at present in good dhands. It flowed from 16th June to 6th November and worked remarkably well, giving a good supply to its 18 branches. A new mouth was made to the Lohano, an important branch, with the result of increasing the cultivation by 720 acres.

6. *Ren*.—This canal now gets its supply from a large lake which takes some time to fill; consequently water does not reach the Ren till late, and this year it did not flow till 13th July, but the supply was then good and maintained till 9th November. The late arrival of water in this canal practically throws out of cultivation a large area of good land on its branches. Considerable expenditure has been incurred on works intended to remedy this, but the result has not been satisfactory, and after careful investigation it is now proposed to feed the principal branches from the Dad and utilize the Ren supply on more convenient land.

7. *Gharo Mahmuda*.—This important channel was formerly a branch of the river; it now feeds the Sangro, Alibhar and Ghalu into which it tails. The canal flows through low katcha land over which much water escapes from its right bank on every fall of the river, and at each rise the water flowing back causes a heavy deposit in the channel. The irrigation of three talukas depends on the Gharo, and a project is about to be submitted by which its supply will be improved and made independent of fluctuations of level in the river. The Sangro feeds a large system of 13 canals, all of which it supplied well after the river attained its proper height.

The Ghalu on which 17 smaller canals depend takes its supply from the end of the Gharo, and it is not good, depending not only on the rise and fall of the river, but on the off-take all down the feeder. The new works will increase the supply and deliver it at a higher and more constant level. The canal did not flow till 11th June and stopped on 14th October.

8. *Nasir*.—This canal for some years received an indifferent supply from the Gharo Mahmuda close to the Ghalu mouth. Last year, owing to a favourable change in the course of the river, it was possible to open an old mouth to the great benefit of the canal and the large system of irrigation depending on it. Compared with previous years the supply was good, and it will most probably improve as the river gets more settled at its mouth. The canal flowed for 3 months from the middle of June.

9. *Sawfrāz*.—Since flood was prevented from entering this canal by the construction of a bund along the first 5 miles of its right bank, its working has been most satisfactory, and it is now one of the best canals in the district. The mouth is favourably situated, and the supply was very good throughout the season, though results would have been better with an earlier rise of the river.

10. *General*.—The lowness of the river in June and July retarded cultivation, especially that of cotton and the earlier crops. Later the supply was excellent and well maintained and cultivation helped by good rain made rapid progress. Although some land was flooded for rabi a late river is not so favourable for this district, as most of the land is high and cannot be watered in a short time.

There was, however, a fair increase in the area cultivated, due chiefly to the few improvements already noted. The increase of revenue was larger in proportion, being partly due to the introduction of irrigation settlement in two talukas. The late rise of the river was very unfavourable for cotton, a crop much grown in this district, but in other respects the supply at the end of the season made up for all deficiencies at the commencement.

11. The following statement shows the collections and charges against revenue for the year and four preceding ones :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on maintenance and Revenue collection.	Percentage on total charges.
		Maintenance and Revenue collection.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	6,93,687	3,24,064	3,36,922	46.72	48.57
1889-90	7,50,917	2,91,483	3,52,147	38.82	46.89
1890-91	7,76,424	3,02,707	3,22,522	38.99	40.15
1891-92	7,78,643	3,42,516	3,65,224	44.00	46.91
1892-93	8,43,460	2,95,713	3,22,691	35.06	38.26

The figures prove great improvement in this district, showing increased revenue and decrease of expenditure.

FULELI CANALS DISTRICT.

1. This district is watered by the Fuleli Canal and its branches, 98 and 967 miles long respectively, and by a few smaller canals taking out direct from the river, which, with their branches 72 miles long, make up 146 miles. Only a small portion of the river bank is subject to overflow, which is checked by a bund 12 miles long. The area of the district is 3,387 square miles.

2. *Fuleli*.—This, one of the finest canals in Sind, never quite stopped flowing throughout the year. It is fed by two mouths, the old and the new, of which the latter, which has a regulator near the river, is the principal, giving about 3/4ths of the supply, while the old mouth now does little more than supply the four branch canals which water the Hyderabad Taluka. On this mouth a new regulator was constructed just before the inundation, but the rise was so peculiar that it was of little use, the water being so low in the early part of the season that it could not be sufficiently raised, and so high in the latter part that raising was not required.

From the 8th August till the 10th September the regulator on new mouth was closed and 4' of water shut off, but notwithstanding this there were many breaches in the tail canals, as very little canal water was being used in low land on account of the heavy rain.

The usual complaints against this reduction were rife from the high lands in Dero Mohbat, but this ought to be the last time they will be heard, as the new regulator at 60th mile will enable full supply to be kept up for these lands. The Saur Guni escape worked fairly well, but better results may be expected when it is improved and the new escapes now in progress are completed. The inundation was unfavourable for the Fuleli as the heavy rain coming on top of highest rise made it difficult to dispose of the water in August and September,

and in June and July there was not enough for high lands on which early rice seedlings are grown.

3. *General.*—South of the new mouth of Fuleli the river for the first time overflowed its bank, causing a flood which did considerable damage to municipal and public buildings and roads of Hyderabad, and also breached the Hyderabad-Umarkot Railway. This spill has since been stopped by a bund. There was also a breach in the Hajipur Bund, owing to the sudden rise of the river by the influx of rain flood through the Baran, a channel which drains much of Kohistan, pouring its waters when in flood into the Indus just opposite the Hajipur Bund. A regulator on the old Fuleli was completed and one at the 60th mile of main canal commenced.

The second diversion of the Imam Janobi was completed and the canal cleared thoroughly to its tail. The season was unfavourable in this district, the water-supply being at times insufficient and at times unmanageable, and the people suffered much from cholera and influenza. The rainfall was very heavy and although useful on high land did great damage in many parts of the district, for which and for the Hajipur breach a considerable number of remissions have been given. The Indus canals worked well, the returns being better than usual.

4. The financial results and charges for the year under report and four previous years are given below :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	5,86,517	2,81,063	2,81,063	47.92	47.92
1889-90	6,45,166	2,96,778	3,02,749	46.00	46.92
1890-91	6,64,151	2,86,228	2,88,308	43.09	43.41
1891-92	6,50,729	2,63,357	2,78,008	40.47	42.72
1892-93	6,33,732	2,78,344	2,97,761	43.92	46.99

The returns from this district are not so favourable, sickness was very prevalent, and the heavy rain was much felt.

KARACHI CANALS DISTRICT.

1. This large district which contains the Delta of the Indus is watered by 1,126 miles of canals, of which 587 miles belong to distributaries. The Indus divides the district, and its banks on both sides are embanked for 91 miles on the left and 63 on the right. At the head of the Delta the Indus separates into two channels, the right bank embankment stops here, but that on the left extends some 15 miles down the left bank of the eastern channel. The whole district down to the commencement of the Delta is thus protected from river floods, but the north western portion of it is liable to floods from the high country to the west in years of heavy rainfall. The principal canals are the Pinyari on the left and the Kalri and Baghiar on the right bank. The area of the district is 6,865 square miles.

2. *Pinyari.*—This large and important canal was opened on 7th April and flowed till the end of October. In the early part of the season the supply was somewhat deficient for high land and the transplantation of rice seedlings was delayed, but afterwards there was plenty of water. There is a regulator at the head of this canal which interferes somewhat with the cultivation on the first 15 miles, where the land is high, as below this the land is low, and during the height of the inundation it is necessary to shut off a considerable depth of water. As in the Fuleli Canal a second sluice at the commencement of the low ground will be necessary and promises a very good return. The Pinyari waters the greater part of three talukas and the cultivation is entirely supplied by flow.

3. *Kalri and Baghiar.*—These canals, formerly channels of the river, are unregulated. The supply in both, though deficient for some time, was ample and

in the Baghiar excessive. This canal overflowed its banks in long distances, and the spill did much damage to cultivation. Some of the most dangerous places were embanked before the inundation, and the work is now approaching completion.

4. *Embankments.*—The river embankments on both sides, but especially on the left, were severely tried by the high level of the river in August, aided by strong monsoon wind and heavy rain. There were 15 breaches on the left and 8 on the right bank; 12 of these occurred at sluices and most of the others were due to the sudden rise of the river on the influx of rain water from Kohistan through the Baran, which meets the Indus just at the head of this district. In many places the water over-topped the bunds, and the land on both sides being flooded, nothing could be done to prevent the destruction of long lengths of earthwork which was rapidly carried away. In contradistinction to the embankments of Upper Sind, which are pierced by a small number of large canals, those of this district have numerous small water courses passing through them. From time to time masonry sluices have been built to the most dangerous of these openings, but they are now much in need of raising and strengthening to withstand the increase of water level which has taken place since their construction, and several still remain through which water is admitted with only brush-wood protection for the sides. The earthwork of these embankments is being yearly raised and strengthened and will soon suffice, but until the number of small openings is reduced to a minimum, and those allowed to remain are provided with strong masonry heads, there will be no safety.

5. *General.*—The season was most disastrous for this district, almost the whole of which was for some time under water. On the right bank in the north the Shal Tuppa was swept by flood from the river, and from the hills lower down a large portion of Jharik was flooded by rain and breaches in the Kalri and further south most of Ghorábári was inundated by overflow from the Bâghiar and breaches in river embankments. On the left bank matters were worse, almost the whole country with exception of Mirpur taluka being flooded from continued overflow of the river through and over the embankments. The remissions are very heavy, amounting to Rs. 1,09,959, and the cost of replacing the damage done to embankments will exceed 1 lakkh. This district is not suited to rabi crops which do not thrive well, but some Rs. 60,000 have been recouped from the flooded area. At many places on the left bank the water level rose higher than in previous year, but the increase in height could be traced to approach of river to that bank or to the influx of rain water, and a general rise of level was not apparent as in previous years. Three miles have been added to length of embankment by extension of Hilyah bund, and that of canals has slightly increased through the resumption by Government of the Karawah which had been leased to a zamindár for five years.

6. The following statement shows collections in this district and charges against revenue for the year and four preceding ones :—

Years.	Total Canal Revenue collected.	REVENUE CHARGES.		Percentage on Maintenance and Revenue collections.	Percentage of total charges.
		Maintenance and Revenue collections.	Total charges against Revenue.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89	3,88,229	1,82,580	2,05,417	47.03	53.68
1889-90	4,18,957	2,19,327	2,36,119	52.47	56.35
1890-91	4,32,294	2,52,487	2,70,525	58.41	62.58
1891-92	4,38,245	2,73,065	3,03,116	62.31	69.17
1892-93	3,80,209	2,31,104	2,68,669	69.99	81.36

The collections show a serious falling off on account of the extensive area flooded. The expenditure is considerably less than that of the previous year, but the percentages are the worst of the five years.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE I.

Cultivation and Water-share of Net Consolidated Revenue for 1892-93 and three previous years.

Canals and Executive Districts.		1889-90.		1890-91.		1891-92.		Average.		1892-93.	
		Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
1	2	3	4	5	6	7	8	9	10	11	
		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
MAJOR WORKS.											
PRODUCTIVE WORKS.											
49.—IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.											
<i>Canals in Operation.</i>											
Begari Canals ...	Desert Canal ...	82,777	1,48,221	81,668	1,46,916	81,777	17,303	85,407	1,04,113	68,331	99,804
	Uabrahah ...	33,540	52,971	30,680	37,359	19,283	15,375	24,005	37,649	23,277	42,005
	Begari ...	141,538	2,76,103	118,238	2,25,411	146,438	2,15,799	133,259	2,60,432	260,586	3,16,005
		238,150	4,87,293	220,586	4,17,726	197,498	3,05,380	225,111	4,02,199	241,458	4,56,817
	Nara Supply Channel ...	6,723	16,442	6,018	15,143	3,411	4,723	5,292	11,426	11,295	29,300
	Eastern Nara ...	86,094	1,02,001	50,091	67,284	29,912	51,991	65,342	75,826	46,017	66,530
	Dimwah ...	122,171	2,40,975	110,566	2,38,343	119,060	2,37,031	117,506	2,43,751	120,884	2,60,031
	Hernawah ...	9,327	16,859	7,377	12,323	7,460	13,139	8,019	14,333	6,571	13,380
	Khivra Canal ...	2,444	4,465	2,340	4,621	2,635	6,315	2,419	5,190	2,717	5,491
	Thar Canal ...	6,112	7,672	9,275	14,954	13,463	17,692	12,063	7,192	10,338	19,507
		45,772	90,508	37,787	64,946	34,831	36,090	40,479	86,947	43,865	89,507
		281,635	4,81,653	223,572	4,34,285	204,905	4,35,745	226,600	4,50,898	238,838	4,65,570
	Total, Major Works ...	539,803	9,67,381	443,958	8,61,931	402,431	7,39,325	462,671	8,53,093	479,696	9,21,967
43.—MINOR WORKS.											
IRRIGATION AND NAVIGATION.											
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.											
<i>Canals in Operation.</i>											
Ghaz Canal ...	Sakhar Canal ...	96,237	2,10,821	83,254	2,11,611	87,303	2,17,505	96,015	2,13,533	96,335	2,15,321
	Ghaz Canal ...	227,555	6,42,041	232,986	7,00,424	233,257	7,09,235	230,943	6,58,948	245,034	7,30,611
		315,842	8,52,862	316,240	9,12,035	320,560	9,26,740	326,958	8,72,481	341,369	9,45,932
Hyderabad Canals.	Mehrabwah ...	14,703	25,518	13,016	21,013	13,168	24,519	13,669	24,723	11,069	20,541
	Ajithab Kucheri ...	8,899	18,196	8,064	16,390	8,260	18,745	8,735	17,712	9,591	19,095
	Mirak ...	15,607	29,819	14,217	24,970	14,064	26,920	14,930	26,737	11,504	21,130
	Sarfarwah ...	20,216	31,960	21,589	33,231	21,141	38,099	21,329	37,447	22,299	46,331
		60,325	1,78,563	56,902	1,72,160	56,633	1,55,303	59,293	1,78,209	57,361	1,59,208
Fulsi Canals ...	Fulsi ...	267,732	5,61,097	277,634	5,90,018	269,926	5,76,095	271,731	5,76,400	274,543	5,75,586
	Total, Minor Works, Capital and Revenue Accounts ...	675,928	16,92,512	681,786	16,74,923	690,920	16,83,211	678,881	16,60,848	705,474	17,20,336
43.—MINOR WORKS.											
IRRIGATION AND NAVIGATION.											
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.											
<i>Canals in Operation.</i>											
Shikarpur Canals.	Canals in Rohri Bunds in Rohri ...	72,698	1,81,652	69,603	1,62,627	72,608	2,02,758	68,113	1,82,379	124,654	3,42,339
	Siud Canal ...	65,845	1,74,210	61,738	1,76,360	64,456	1,83,081	62,956	1,77,869	63,285	1,83,641
		138,543	3,55,862	131,341	3,38,987	137,064	3,85,839	131,069	3,60,248	187,939	5,25,980
	Nara ...	282,083	5,74,406	185,979	5,32,157	190,825	5,33,967	190,629	5,46,844	225,349	5,71,421
	Manchar ...	...	...	...	...	...	...	...	...	...	...
	Arad ...	...	...	...	...	...	...	...	...	...	...
	Prithal ...	...	...	...	...	...	...	...	...	...	...
	Wair ...	6,727	16,780	6,027	15,703	6,073	17,707	3,700	9,852	10,219	20,015
	Mari ...	4,188	10,712	6,186	15,226	6,494	15,301	6,439	16,780	5,149	12,335
	Phita ...	5,532	11,018	6,091	13,733	8,334	18,741	6,152	11,580	4,963	14,190
	Diara Canals ...	...	...	...	...	...	...	...	...	...	...
	New feeder Western Nara ...	...	...	...	...	...	...	...	...	...	...
		238,480	6,12,921	217,057	6,01,769	246,673	6,65,716	231,046	6,27,337	330,917	7,49,610
	Nasrat ...	25,611	69,266	23,494	57,336	21,890	58,558	24,575	57,737	35,025	60,748
	Nolaki ...	52,703	1,16,947	48,492	1,08,184	49,352	1,10,210	50,212	1,14,717	30,374	1,10,789
	Dambro ...	9,906	20,896	10,779	22,899	11,018	24,098	10,231	21,356	11,576	21,933
	Dadwari ...	26,306	51,201	26,932	51,032	27,708	58,165	26,823	55,856	30,617	61,649
	Renada ...	14,150	25,312	16,977	31,761	17,046	31,997	16,654	30,423	30,121	38,233
	Ghazro Mahunda ...	25,302	1,14,175	27,492	1,19,714	55,925	1,10,420	26,198	1,16,781	61,432	1,37,646
	Kari Shumail ...	26,075	51,610	24,719	70,704	20,131	61,824	33,323	61,179	27,940	59,496
	Nasir ...	28,208	52,362	29,250	62,599	26,275	51,843	27,014	56,091	37,230	67,674
	Other Canals ...	26,531	56,994	26,872	58,040	29,461	61,562	27,241	58,940	31,613	69,793
		274,871	5,50,722	273,230	5,82,376	270,919	6,00,992	273,047	5,71,606	381,167	6,18,616
	Other Canals ...	31,184	55,453	18,540	47,687	19,915	49,767	23,216	50,302	18,790	34,538
	Fulsi Canals ...	31,181	55,453	18,540	47,687	19,915	49,767	23,216	50,302	18,790	34,538

TABLE I—continued.

Canals and Executive Districts.	1889-90.		1890-91.		1891-92.		Average.		1892-93.	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
1	2	3	4	5	6	7	8	9	10	11
MINOR WORKS—continued.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
IRRIGATION AND NAVIGATION—contd.										
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.										
<i>Canals in Operation—continued.</i>										
(Canals north of Kotri ...)	15,770	35,882	7,293	17,177	7,440	17,685	10,969	25,381	8,006	16,007
Kalri ...	71,748	24,616	11,260	26,271	12,573	31,498	12,103	28,122	11,554	20,751
Baghair ...	22,551	46,381	32,707	67,732	34,438	58,311	22,782	51,428	21,219	46,533
Uchita ...	9,300	19,356	12,016	23,227	11,383	21,921	11,076	21,438	9,439	15,093
Canals in Tatta, &c. ...	10,509	18,014	11,632	19,965	8,265	17,347	10,696	18,442	6,858	9,659
Shal Canals ...	2,963	7,968	3,143	5,561	2,724	7,447	3,011	6,169	2,610	2,901
Pinjari ...	77,919	1,06,639	68,443	1,01,527	63,223	1,57,325	70,873	1,01,927	71,093	1,27,410
Canals in Mirpur Batoro ...	17,743	37,445	16,168	39,974	14,608	35,786	16,173	37,423	13,689	31,774
Canals in Sujawal ...	7,901	15,264	7,321	15,313	7,202	12,888	7,401	14,165	9,118	10,785
Satta ...	9,543	19,317	10,706	16,657	9,555	19,717	9,813	19,321	9,301	13,281
Canals in Jati ...	2,051	4,784	2,494	4,739	2,076	4,592	2,197	4,835	2,769	5,846
Khanta ...	5,003	11,765	5,415	9,174	5,497	13,079	5,375	11,324	4,721	10,941
Kokawari ...	13,345	25,290	13,327	28,161	14,521	32,307	13,431	29,608	10,740	21,812
Canals in Bhithbandar ...	91,694	3,341	2,027	4,459	7,094	4,719	2,918	5,370	1,830	3,776
Bunds, left bank ...	...	...	...	...	...	...	...	...	...	...
Bunds, right bank ...	...	...	...	...	...	...	...	...	...	...
Total Minor Works, Revenue Accounts only ...	200,332	4,38,223	191,547	4,22,200	180,099	4,70,526	188,016	4,79,317	186,562	5,30,967
AGRICULTURAL.	890,710	20,15,485	824,814	19,92,724	867,630	21,00,640	839,292	20,88,617	891,403	22,19,471
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.										
<i>In Operation.</i>										
Begri Canal ... Kashmir Bund ...	5,363	9,954	4,559	8,237	5,717	6,103	4,546	8,135	3,094	5,006
Shikarpur Canals ... Kashmir Bund ...	...	...	...	...	...	...	...	...	...	...
Shikarpur Canals ... Sukkur Begri Bund ...	...	...	...	...	...	...	...	...	...	...
Ghar Canals ...	...	...	...	...	...	...	...	...	...	...
Western Nara ... Nara Bunds ...	...	...	...	...	...	...	...	...	...	...
Total, Agricultural Works ...	5,363	9,954	4,559	8,237	5,717	6,103	4,546	8,115	3,094	5,006
Begri Canals District ...	263,313	4,30,247	225,155	4,39,013	201,203	3,11,683	229,957	4,10,214	244,552	4,62,221
Shikarpur Canals District ...	136,315	2,56,162	131,311	3,78,393	125,241	3,35,339	131,069	3,09,153	157,949	2,52,960
Ghar Canals District ...	315,542	8,72,842	318,359	9,12,048	319,580	9,26,810	317,857	8,97,229	317,599	9,46,122
Western Nara District ...	228,480	6,12,905	217,037	6,09,170	246,650	6,05,716	234,947	6,37,157	309,947	7,49,310
Eastern Nara District ...	281,653	4,91,698	225,272	4,34,253	201,955	4,33,745	226,090	4,30,966	235,578	4,63,370
Hyderabad Canals District ...	265,225	7,29,225	339,232	7,56,135	362,512	7,64,397	362,340	7,49,006	781,328	8,17,864
Fuleli Canals District ...	228,016	6,10,540	326,623	6,55,705	289,541	6,24,163	294,917	6,25,102	288,284	6,06,694
Karachi Canals District ...	209,832	4,38,223	194,547	4,32,200	189,099	4,36,582	198,016	4,39,317	186,562	2,30,967
Total ...	2,109,504	45,83,993	1,955,157	45,27,816	1,949,717	45,40,379	2,004,393	45,50,675	2,167,593	49,06,000

Correct figures obtained after despatch of Revenue Report.
 The figures in this statement are assessments; they do not include the Begri figures twice taken credit for by Examiner, vide note on Statement C in body of report. This note is applicable to tables following.
 On authorized cultivation ... 45,00,411
 On unauthorized cultivation ... 37,068
 45,40,279

TABLE II.

Area of Cultivation and Canal Revenue for 1892-93, and five previous years.

Years.	CULTIVATION.			Water-share of net consolidated Revenue.	Hakdo.	Miscellaneous.	Total, Canal Revenue.
	Government.	Jāghir.	Total.				
	1	2	3	4	5	6	7	8
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
1847-58	1,633,627	217,467	1,871,114	37,30,291	1,12,503	48,399	38,78,061
1858-69	1,587,590	231,079	2,118,635	42,15,097	1,09,135	49,004	41,69,135
1869-80	2,100,804	210,045	2,345,819	46,53,923	1,52,646	55,161	47,91,745
1880-91	1,965,157	218,316	2,203,473	45,57,315	1,21,590	55,105	47,06,010
1891-92	1,949,717	216,914	2,165,631	46,40,379	92,400	69,900	46,98,579
Average	1,941,172	220,462	2,161,734	45,10,603	1,14,815	53,813	45,68,911
1892-93	2,167,593	231,096	2,399,455	49,06,003	1,15,450	69,886	49,88,336
Increase or Decrease	+526,787	+435	+237,321	+5,58,397	+19,165	+11,073	+5,20,300

Note.—The figures in this statement are assessments with the exception of Hakdo and Miscellaneous, which are actuals.

H. M. THOMPSON, M.Inst.C.E.,
 Superintending Engineer, Indus Left Bank Division.

TABLE III.

Area of Cultivation and Canal Revenue for 1892-93.

Canals and Districts.	CULTIVATION.			Water-share of net consolidated Revenue as in Table VII.	Hakāba.	Miscellaneous.	Total Canal Revenue.	
	Government.	Jāghir.	Total.					
1	2	3	4	5	6	7	8	
MAJOR WORKS.								
PRODUCTIVE WORKS.								
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.								
Canals in Operation.								
Begāri Canals	Desert Canal	58,331	36,825	95,156	99,004	28,410	312	1,27,726
	Unharwah	23,277	...	23,277	42,008	...	3	42,011
	Begāri	150,850	32,674	192,524	3,15,605	28,610	1,000	3,45,215
		241,458	69,499	310,957	4,56,617	57,020	1,315	5,14,952
Eastern Nāra...	Nāra Supply Channel	11,266	1,355	12,621	29,303	443	9,157	38,903
	Eastern Nāra	46,017	...	46,017	66,830	...	7,015	73,845
	Mithrao Canal	120,894	438	121,332	2,50,031	179	1,862	2,51,572
	Dunwah	6,574	...	6,574	13,269	...	60	13,329
	Horanwah	2,717	...	2,717	5,494	...	...	5,494
	Khipra Canal	7,192	...	7,192	10,836	...	51	10,887
	Thar Canal	43,868	3,091	46,959	89,607	1,464	520	91,591
		2,38,628	4,884	243,512	4,65,370	2,086	18,165	4,85,621
Total, Major Works		479,986	74,383	554,369	9,21,987	59,106	19,480	10,06,573
MINOR WORKS.								
IRRIGATION AND NAVIGATION.								
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.								
Canals in Operation.								
Ghār Canals ...	{ Sukkur	86,535	2,223	88,758	2,15,331	1,061	1,307	2,17,699
	{ Ghār Canal	245,084	10,519	255,553	7,30,811	3,438	6,312	7,46,561
		331,569	12,742	344,311	9,46,142	4,499	7,619	9,58,260
Hyderabad Canals	{ Mohrabwāh	11,059	192	11,251	20,544	1	80	20,625
	{ Alibhār Kacheri	9,501	1,471	10,972	19,906	462	40	20,468
	{ Marāk	51,502	7,284	58,786	1,16,397	2,363	380	1,19,140
	{ Sarfrāzwāh	25,299	4,471	29,770	42,361	1,405	313	44,079
		97,361	13,418	110,779	1,99,208	4,231	812	2,04,252
Fuleli Canal District	Fuleli	274,544	57,430	331,974	5,75,586	24,084	3,463	6,03,133
Total Minor Works, Capital and Revenue Accounts		703,474	83,590	787,064	17,20,936	32,814	11,895	17,65,645
MINOR WORKS.								
IRRIGATION AND NAVIGATION.								
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.								
Canals in Operation.								
Shikārpur Canals	{ Canals in Rohri	124,564	7,415	131,979	3,42,339	1,966	3,578	3,47,883
	{ Bunds in Rohri	...	...	...	...	...	28	28
	{ Sind Canal	63,385	4,292	67,677	1,83,641	2,440	1,036	1,87,117
		187,949	11,707	199,656	5,25,980	4,406	4,642	5,35,028
Western Nāra	Nāra	225,549	13,750	239,279	5,71,421	4,049	14,761	5,90,231
	Manchar	17,259	...	17,259	33,021	...	...	33,021
	Aral	9,916	3,165	13,081	27,212	898	...	28,110
	Pritchard Canal	10,219	...	10,219	26,013	...	197	26,210
	Wahur	5,149	...	5,149	12,555	...	19	12,574
	Marvi	4,983	...	4,983	14,190	...	417	14,607
	Phitta	10,285	892	11,177	24,589	287	592	25,468
	New feeder Western Nāra	1,442	...	1,442	3,732	...	...	3,732
	Dādū Canals	16,165	291	16,456	37,077	66	175	37,318
		300,947	18,078	319,025	7,49,610	5,300	16,161	7,71,071

TABLE III—continued.

Canals and Districts.	CULTIVATION.			Water-share of net consolidated Revenue as in Table VII.	Jalkiba.	Miscellaneous.	Total Canal Revenue.
	Government.	Jagbir.	Total.				
1	2	3	4	5	6	7	8
MINOR WORKS—continued.							
IRRIGATION AND NAVIGATION—continued.							
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.							
Canals in Operation—continued.							
Hyderabad Canals	Nasrat	26,055	584	26,639	60,718	191	61,459
	Nasakhi	50,374	2,011	52,385	1,10,780	683	1,11,995
	Dambo	11,876	825	12,701	24,935	245	25,442
	Dudwah	30,842	5,920	36,767	41,649	4,270	46,774
	Renwah	20,421	37	20,458	38,523	6	39,371
	Ghāro Mahanūla	61,462	14,419	75,871	1,37,616	5,088	1,44,046
	Kari Shumali	27,809	7,640	35,449	58,496	2,359	61,263
	Nasirwah	27,220	1,439	28,659	57,074	359	58,012
	Other Canals	31,613	1,583	33,196	68,795	551	69,500
		287,167	34,458	321,625	6,18,856	10,792	6,34,864
Fuleli Canals	Other Canals	18,780	710	19,490	34,238	208	34,727
	Hajipur Bund						
		18,780	710	19,490	34,238	208	34,727
Karachi Canals	Canals north of Kotri	8,036	1,331	9,417	16,607	346	17,174
	Kabri	11,584	468	12,052	20,761	236	21,597
	Baghia	74,219	2,060	76,208	46,553	928	48,344
	Uchita	9,439	235	9,674	15,008	...	15,339
	Canals in Tatta	6,388	839	7,227	9,899	154	10,912
	Shal Canals	2,610	...	2,610	...	22	2,632
	Tanyari	21,029	2,533	23,562	1,22,410	530	1,23,440
	Canals in Mirpur Batora	13,848	...	13,848	31,773	43	31,816
	Canals in Sujawal	9,178	264	9,442	10,205	126	10,428
	Satta	9,301	149	9,450	13,281	4	13,290
	Canals in Jati	3,769	44	3,812	5,896	11	5,927
	Rhanta	4,721	423	5,144	10,911	58	11,004
	Kokawari	10,780	...	10,780	23,812	...	22,586
	Canals in Shalibandar	1,820	240	2,070	3,775	112	3,892
	Bunds, left bank	...	278	278	...	64	138
	Bunds, right bank	...	427	427	...	253	263
		186,562	8,470	194,732	3,30,987	2,824	3,40,061
Total Minor Works, Revenue Accounts only							
		981,406	73,123	1,054,528	22,59,471	23,530	23,15,757
AGRICULTURAL WORKS.							
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.							
In Operation.							
Begari Canals District	Kashmir Bund	3,094	...	3,094	5,606	...	5,968
Shikarpur Canals District	Kusimpor Bund	...	...	...	...	5	5
	Sukkur Begari Bund	...	...	...	...	283	283
		...	...	...	...	288	288
Ghār Canals District	Ghār Bunds	...	...	...	...	37	37
Western Nāra District	Nāra Bunds	...	...	...	...	57	57
Total Agricultural Works							
		3,094	...	3,094	5,606	744	6,330
Agricultural Receipts.							
Begari Canals District	...	...	...	...	...	...	...
Shikarpur Canals District	...	...	...	...	...	...	...
Ghār Canals District	...	...	...	...	...	...	...
Western Nāra Canals District	...	...	...	...	...	...	...
Eastern Nāra Canals District	...	...	...	...	...	5	5
Hyderabad Canals District	...	...	...	...	...	...	...
Fuleli Canals District	...	...	...	...	...	6	6
Karachi Canals District	...	...	...	...	...	...	...
		...	...	...	...	11	11
Begari Canals District	...	244,532	68,499	314,031	4,02,223	67,020	5,20,922
Shikarpur Canals District	...	387,945	13,707	399,656	5,25,980	4,406	5,35,816
Ghār Canals District	...	331,500	12,542	344,211	9,46,142	4,399	9,58,297
Western Nāra District	...	300,947	18,078	319,025	7,49,810	6,300	7,71,128
Eastern Nāra District	...	238,528	4,884	243,412	4,65,370	2,036	4,85,626
Hyderabad Canals District	...	384,628	47,876	432,404	8,17,864	16,023	8,39,116
Fuleli Canals District	...	293,324	58,140	351,464	6,09,824	24,293	6,37,860
Karachi Canals District	...	186,562	8,170	194,732	3,30,987	2,824	3,40,073
		2,167,950	231,096	2,399,056	49,08,000	115,450	50,88,536

Note.—The figures in this statement are assessments with the exception of Jalkiba and Miscellaneous, which are actuals.

H. M. THOMPSON, M. Inst. C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE III-A.

*Area of Cultivation, Assessments and Relizations and Balances outstanding in respect of Lands in
Khelát and Jágíir Lands in Sind for 1892-93.*

Canals and Executive Districts.		AREA CULTIVATED DURING YEAR.			Un-realized Balance at end of last year.	ASSESSMENT OF THE YEAR.			Remis-sions.	Total for collection.	Actual Realiza-tion.	Balance stand-ing at end of year.
		Kharif.	Rabi.	Total.		Kharif.	Rabi.	Total.				
1		2	3	4	5	6	7	8	9	10	11	12
MAJOR WORKS.												
PRODUCTIVE WORKS.												
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.												
Canals in Operation.												
Begari Canals. (Foreign).	Desert Canal	32,993	3,832	36,825	23,379	32,994	3,832	36,826	17,555	47,650	28,493	19,217
	Begari Canals	21,017	5,672	26,689	15,304	21,019	5,672	26,691	2,805	39,190	25,666	13,524
		54,010	9,504	63,514	38,683	54,013	9,504	63,517	20,360	86,840	54,069	32,771
	Desert Canal	..	..	..	6	..	..	..	..	6	..	..
	Unbarwah	..	..	..	..	..	..	..	..	..	..	..
	Begari	5,470	515	5,985	622	2,642	260	1,892	..	3,514	2,945	559
		5,470	515	5,985	623	2,642	250	2,992	..	3,520	2,951	569
		59,480	10,019	69,499	44,311	56,655	9,754	66,409	20,360	90,390	57,020	33,340
	Nara Supply Channel	174	1,191	1,365	..	65	443	508	..	508	443	65
	Eastern Nara	429	9	438	..	176	3	179	..	179	179	..
Eastern Nara	Mithana Canal	..	..	..	..	..	..	..	..	..	..	
	Dinwadi	..	..	..	..	..	..	..	..	..	..	
	Heraonah	..	..	..	..	..	..	..	..	..	..	
	Krupa Canal	..	..	..	..	..	..	..	..	..	..	
	Thur Canal	2,921	170	3,091	..	1,400	64	1,464	..	1,464	1,464	..
	3,224	1,360	4,584	..	1,641	610	2,251	..	2,251	2,096	66	
Total, Major Works		63,064	11,379	74,443	44,311	58,296	10,264	68,560	20,360	92,511	59,106	33,405
MINOR WORKS—IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.												
Canals in Operation.												
Ghar Canals	Sukkur Canal	1,539	685	2,223	547	836	334	1,170	..	1,717	1,061	656
	Ghar Canals	8,025	2,494	10,519	284	2,997	840	3,837	..	4,121	3,433	688
		9,563	3,179	12,742	831	3,833	1,174	5,007	..	5,838	4,494	1,343
Mrd. a b a d Canals.	Mehabadi	167	25	192	..	4	1	..	..	1	..	..
	Alfhar Kachar	1,454	13	1,467	..	466	..	466	..	462	..	..
	Marak	7,168	116	7,284	335	2,460	34	2,494	..	2,459	2,363	96
	Sarfaraz	4,019	422	4,441	330	1,425	111	1,536	..	1,866	1,903	461
		12,842	576	13,418	291	4,361	146	4,507	..	4,783	4,231	557
Fulehi Canals	Fulehi	48,713	8,717	57,430	1,002	21,150	3,178	24,328	..	25,080	24,084	1,896
		71,118	12,472	83,590	2,724	29,334	4,498	33,832	..	36,556	34,814	3,742
Total Minor Works, Capital and Revenue Accounts		71,118	12,472	83,590	2,724	29,334	4,498	33,832	..	36,556	34,814	3,742
MINOR WORKS—IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.												
Canals in Operation.												
Sikarpur Canals.	Canals in Rohri	4,638	2,777	7,415	714	1,821	1,056	2,877	..	3,597	1,966	1,625
	Banda in Rohri	3,776	516	4,492	1,453	2,028	225	2,253	..	3,703	2,449	553
	Sind Canal	8,414	3,293	11,707	2,167	3,849	1,278	5,127	..	7,294	4,406	2,889
		8,918	6,812	15,730	2,172	3,420	2,092	5,612	..	7,684	4,949	3,055
Western Nara	Nara	1,941	170	3,011	63	626	47	673	..	736	643	63
	Manchar	300	2,865	3,165	751	147	1,096	1,173	..	1,924	998	1,025
	Arad	..	..	..	..	..	..	..	..	..	..	..
	Pritcha-d Canal	..	..	..	..	..	..	..	..	..	..	..
	Wahar	..	..	..	..	..	..	..	..	..	..	..
	Benwah	..	..	..	..	..	..	..	..	..	..	..
	Phutra	684	208	892	32	281	80	341	..	373	287	84
	Dadu Canals	185	106	291	30	64	38	102	..	132	66	60
	8,967	9,991	18,078	2,965	3,892	3,326	7,123	..	10,113	5,300	4,913	
Mrd. a b a d Canals.	Nasrat	418	166	584	13	142	45	187	..	299	191	9
	Nadiachi	1,941	170	3,011	63	626	47	673	..	736	643	63
	Dambro	794	31	825	—	244	4	248	..	247	245	2
	Dadwah	5,920	60	5,920	3	1,706	185	1,891	..	1,888	1,570	618
	Benwah	..	..	..	..	..	..	..	..	..	..	..
	Gharo Mahmuda	14,940	579	14,419	524	4,991	202	6,193	..	5,711	5,088	725
	Kari Shumali	1,610	39	7,640	648	2,632	14	2,646	..	3,094	2,329	765
	Nauwah	1,409	37	1,459	41	473	1	474	..	518	399	119
	Other Canals	1,194	230	1,233	51	412	117	529	..	589	551	32
		32,666	1,862	34,458	1,736	11,275	618	11,893	..	12,989	10,792	2,197

TABLE III-A.--continued.

Canals and Executive Districts.	AREA CULTIVATED DURING YEAR.			Un- realized balance at end of last year.	ASSESSMENT OF THE YEAR.			Recei- sion.	Total for collection.	Actual Realiza- tion.	Balance out- stand- ing at end of year.
	Kharif.	Rabi.	Total.		Kharif.	Rabi.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12
MINOR WORKS—IRRIGATION AND NAVIGATION—continued.											
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.											
<i>Canals in Operation—continued.</i>											
Fateh Canals .. Other Canals	658	27	786	—11	270	18	288	..	272	208	61
Fateh Canals .. Hajipur Bund	658	27	786	—11	270	18	288	..	272	208	61
Canals North of Jotei	569	782	1,351	246	111	152	263	..	639	248	290
Kalpi	229	169	398	144	94	43	137	..	128	226	15
Taghar	1,348	149	2,000	646	551	207	758	..	1,822	928	698
Lohola	492	49	541	..	..	..	..	..	..	..	..
Canals in Talte, &c.	253	256	509	81	189	65	254	..	336	351	204
Shal Canals	..	..	..	..	..	..	..	..	..	..	..
Playtil	1,411	92	1,503	..	615	27	642	..	615	509	314
Canals in Marpur Batoro	..	..	..	..	..	..	..	..	..	..	..
Canals in Gopipat	184	189	373	..	79	21	100	..	101	196	21
Batta	148	41	189	..	53	14	67	..	51	4	17
Canals in Jati	..	..	..	..	..	..	..	..	..	..	..
Khanta	123	..	123	..	58	..	58	..	58	58	14
Kokowari	..	..	..	..	..	..	..	..	..	..	..
Canals in Shikhandar	180	..	180	..	112	..	112	..	112	112	..
Bunda, left bank	272	6	278	..	32	120	152	..	154	61	90
Bunda, right bank	421	6	427	..	52	273	325	..	327	253	74
	5,812	2,222	8,034	1,361	2,725	613	3,348	..	4,137	2,824	1,308
Total Minor Works, Revenue Accounts only	15,632	17,442	33,074	2,541	21,277	5,758	27,035	..	21,608	21,520	11,790
AGRICULTURAL WORKS.											
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.											
<i>In Operation.</i>											
Regal Canals .. Kishmor Bund	..	..	..	..	..	..	..	..	..	..	..
Shikharput .. Kishmor Bund	..	..	..	..	..	..	..	..	..	..	..
Shikharput .. Sakkar Bogari Bund	..	..	..	..	..	..	..	..	..	..	..
Other Canals .. Other Bunds	..	..	..	..	..	..	..	..	..	..	..
Western Nara .. Nara Bunds	..	..	..	..	..	..	..	..	..	..	..
Total Agricultural Works	..	..	..	..	..	..	..	..	..	..	..
Regal Canals District	19,180	10,018	29,198	44,312	16,655	9,751	26,406	36,309	36,309	57,020	32,140
Shikharput Canals	9,414	3,222	12,636	2,187	2,849	1,274	4,129	..	2,294	4,406	2,988
Other Canals	2,563	3,179	5,742	321	5,422	4,774	10,196	..	5,436	4,498	1,210
Western Nara	8,892	2,798	11,690	2,335	3,892	2,238	6,130	..	10,113	5,300	4,813
Eastern Nara	3,324	1,360	4,684	..	1,641	510	2,151	..	2,151	2,094	57
Hyderabad Canals	45,193	2,574	47,767	1,132	15,266	764	16,030	..	17,772	16,023	2,254
Fateh Canals	19,396	8,114	27,510	5,591	21,120	3,191	24,311	..	24,311	24,292	1,910
Karachi Canals	5,812	2,222	8,034	1,361	2,725	613	3,348	..	4,137	2,824	1,308
	102,964	41,592	144,556	24,078	49,991	20,550	70,541	36,309	36,309	115,459	48,417

Note.—The figures in this statement are assessments.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE IV.

Revenue Expenditure on New Works, Maintenance and Repairs, Establishment charges in the Public Works Department and Revenue Department on Irrigation Works in Sind during the year 1892-93.

REVENUE EXPENDITURE.													TOTAL EXPENDITURE.					
Canals and Executive Districts.	Improvements.				Maintenance and Repairs.						Revenue Collection charges.	Total Columns 4 to 12.	Works.	Establishment.			Total.	
	Works.	Regular Estab-lishment.	Tools and Plant.	Total.	Clearance Expenditure.			Regular Estab-lishment.	Tools and Plant.	Total.				Public Works Department (in-cludes Tools and Plant).	Civil Depart-ment Collection charges.	Indirect charges.		
					Works.	Work Estab-lishment.	Total.											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
MAJOR WORKS.																		
PRODUCTIVE WORKS.																		
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.																		
Canals in Operation.																		
Bechan Canal District.	(Desert Canal ...	27,553	8,599	57	36,209	28,009	4,363	42,487	13,247	39	55,822	12,055	67,877	70,040	21,982	12,055	3,364	1,07,441
	Unharwah ...	...	...	...	...	6,451	1,658	8,109	2,482	51	10,732	4,809	15,532	8,190	2,533	4,009	347	15,619
	Begri ...	...	...	...	...	19,191	6,487	25,588	9,651	176	35,415	35,542	70,507	25,588	9,927	35,542	1,504	72,551
		27,553	8,599	57	36,209	43,754	12,511	76,265	25,356	315	1,01,900	52,398	1,54,296	1,03,818	34,327	52,398	5,303	1,60,671
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Nara District.	(Nara Supply Channel ...	...	...	...	...	609	1,106	1,708	463	...	2,171	2,567	5,038	1,708	463	2,567	65	5,103
	Eastern Nara ...	...	...	...	...	36,229	9,419	35,878	117	61	35,795	6,888	42,614	35,878	98	6,888	491	42,699
	Mithra Canal ...	8,829	144	6	9,079	21,307	5,759	29,066	3,365	147	34,473	22,913	57,386	38,796	2,062	27,083	13	67,961
	Dinwah ...	...	...	...	...	3,075	741	3,816	...	24	3,749	1,233	5,003	3,816	...	1,233	...	6,052
	Hernanah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Nara District.	Khajra Canal ...	...	...	...	...	3,767	827	4,594	...	35	5,012	1,100	3,712	2,644	...	3,712	289	24,518
	Thar Canal ...	...	...	...	...	8,760	4,086	12,846	1,570	137	15,511	9,127	24,298	13,458	1,713	9,127	...	34,518
		8,829	144	6	9,079	31,976	25,800	57,470	8,066	427	62,063	48,533	1,10,747	96,729	5,612	66,885	729	1,49,555
	Total, Major Works	36,382	8,734	63	45,179	1,25,421	38,311	1,63,733	30,445	742	1,94,922	99,091	2,94,013	2,00,117	39,841	99,091	6,034	3,45,225
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
MINOR WORKS—IRRIGATION AND NAVIGATION.																		
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.																		
Canals in Operation.																		
Ghar Canal District.	(Sukkur Canal ...	100	23	1	124	15,351	5,728	21,110	7,012	161	28,288	12,755	41,013	31,215	7,307	12,755	986	42,163
	Ghar Canal ...	2,962	679	8	3,649	51,310	16,343	67,653	21,302	242	89,297	60,150	1,49,547	70,015	22,321	90,150	3,077	1,55,473
		2,262	712	9	2,983	72,667	16,101	86,968	28,314	401	1,17,680	72,303	1,90,459	98,720	23,333	72,303	4,063	1,97,636
Reynold Canal District.	(Meharwal ...	...	...	...	...	813	562	1,375	268	11	389	633	1,024	139	250	1,024	37	1,375
	Alibhai Kachori ...	...	...	...	...	3,357	955	4,312	225	4	2,830	261	3,091	2,297	225	3,091	31	3,416
	Mirak ...	7,847	3,054	23	10,924	9,817	3,391	13,208	4,677	20	16,673	5,908	22,600	19,983	7,698	5,908	1,052	34,275
	Sarfaraz ...	454	165	...	619	6,377	1,488	7,865	2,837	13	10,700	2,491	13,200	8,319	2,000	2,491	423	14,522
		8,798	3,219	23	12,040	16,191	6,020	37,413	7,570	48	24,947	8,692	33,619	25,726	10,728	8,692	1,514	46,947
Fuleli Canal District.	Fuleli ...	11,361	2,835	41	14,237	58,759	17,064	75,823	19,040	217	95,169	55,229	1,50,697	87,204	22,219	25,229	3,066	1,48,016
	Total, Minor Works, Capital and Revenue Accounts	21,021	6,784	37	28,745	1,12,425	39,311	1,82,226	54,832	692	2,37,800	1,16,506	3,54,306	2,04,100	62,385	1,16,506	5,610	3,91,691
MINOR WORKS—IRRIGATION AND NAVIGATION.																		
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.																		
Canals in Operation.																		
Sukkur Canal District.	(Canals in Rohri ...	490	145	3	638	31,959	6,970	41,838	12,423	207	54,668	32,335	86,822	42,323	12,774	52,335	...	87,461
	Canals in Rohri ...	...	...	...	...	2,105	678	2,783	827	14	3,624	...	3,624	2,783	...	...	...	3,416
	Sind Canal ...	...	...	...	...	15,131	2,929	18,061	4,472	74	19,007	17,306	37,413	15,691	4,310	17,306	...	105
	Garang, Rajib and Chitti ...	81	24	...	105	...	...	...	...	...	...	...	...	...	...	...	...	...
		571	169	3	743	49,105	10,577	59,682	17,723	290	77,099	50,161	1,27,800	60,755	18,189	50,161	...	1,28,903

TABLE IV—continued.

REVENUE EXPENDITURE.																			TOTAL EXPENDITURE.																
Canals and Executive Districts.	Improvements.				Maintenance and Repairs.							Revenue Collection charges.	Total Columns 6 to 12.	Establishment.				Total.																	
	Works.	Regular Estab-lish-ment.	Tools and Plant.	Total.	Clearance Expenditure.			Regular Estab-lish-ment.	Tools and Plant.	Total.	Works.			Public Works Depart-ment (in-cludes Tools and Plant).	Civil Depart-ment Collec-tion charges.	Indirect charges.																			
					Works.	Works Estab-lish-ment.	Total.																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																		
MINOR WORKS, IRRIGATION AND NAVIGATION—continued.																																			
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.																																			
Canals in Operation—contd.																																			
Western Nile District.	Natra	72,231	12,992	352	86,663	38,148	44,530	52,672	8,947	216	46,420	61,677	1,21,344	1,95,902	27,545	64,677	...	2,12,324																	
	Dahara Canal	19,812	3,476	90	23,383	...	...	...	...	...	...	...	...	19,915	3,571	...	...	23,185																	
	Pritchard Canal	15,559	2,794	77	18,618	47,981	...	47,981	3,471	29	25,533	2,586	36,324	33,728	6,544	2,566	...	42,857																	
	Wahne	...	...	...	...	323	203	...	410	72	2	491	1,213	1,799	410	74	1,213	1,799																	
	Daksh	...	...	...	...	2,550	781	3,628	641	17	4,301	2,506	6,997	3,639	607	2,506	...	6,517																	
	Phida	...	...	...	...	6,302	339	7,121	1,263	35	5,448	3,214	15,132	2,578	4,280	3,714	...	7,472																	
	Didi Canals	137	91	2	540	...	...	...	...	...	...	...	...	...	...	...	...	...																	
	1,00,150	19,513	539	1,20,201	68,438	16,307	51,655	44,929	402	97,586	76,859	4,28,766	9,91,703	54,505	76,389	...	2,04,770																		
Hyderabad District.	Nasrat	632	303	11	1,154	4,694	1,493	6,177	2,189	—	3,981	6,072	14,433	7,029	2,482	6,029	...	15,607																	
	Nasakhi	417	139	—	800	4,632	1,904	6,449	2,338	—	7,601	11,514	2,000	2,881	11,146	...	20,761																		
	Dandora	...	...	...	...	4,051	974	5,028	1,783	—	6,909	2,518	9,340	5,739	1,775	2,518	9,340																		
	Daksh	8,233	2,907	—	11,287	12,800	2,337	16,773	6,770	11	22,698	4,280	26,334	2,681	6,296	6,296	39,004																		
	Rewari	...	...	...	...	2,231	1,017	4,651	1,438	—	5,185	3,341	9,341	4,564	1,424	3,341	9,341																		
	Ghlan Mahmud	...	...	...	...	27,366	4,783	30,621	13,009	33	40,661	14,323	63,344	36,652	12,974	14,323	63,344																		
	Kari Shumali	...	...	...	...	9,271	2,277	11,091	4,113	—	15,304	6,079	21,783	11,698	4,419	6,079	21,783																		
	Nasirpur	...	...	...	...	34,598	2,532	37,423	6,165	—	23,683	5,740	29,350	37,143	8,176	5,740	29,350																		
	Other Canals	...	...	...	...	8,130	95	8,123	2,323	—	12,352	6,969	19,231	9,129	2,227	6,969	19,231																		
		9,637	3,419	—	13,047	54,723	18,912	71,631	60,681	102	1,52,064	67,400	2,15,914	1,32,672	43,389	62,910	...	2,15,901																	
Fulli Canal District.	Other Canals	...	...	...	...	18,796	4,960	20,706	6,834	82	21,532	3,074	28,676	20,676	6,576	3,694	...	28,676																	
	Hajipur Band	...	...	...	...	3,166	653	3,809	869	5	4,700	...	4,700	3,800	692	...	4,700																		
Karnal Canal District.	...	...	...	...	...	21,007	2,465	24,545	5,722	20	26,288	7,004	33,322	24,315	5,722	3,004	...	33,322																	
	Canals, North of Kotli	...	...	...	...	5,417	516	6,561	1,775	112	7,725	4,206	9,431	5,903	1,763	1,766	...	9,431																	
	Kalri	...	...	...	...	5,209	1,700	6,949	2,015	14	8,989	2,017	11,102	6,969	2,061	2,067	...	41,007																	
	Beghar	8,636	2,868	17	11,289	12,956	3,194	16,756	3,194	—	19,741	4,540	24,328	18,563	7,097	4,247	...	33,556																	
	Uchla	...	...	...	...	147	44	191	1,701	—	3,000	991	1,701	147	1,408	...	3,763																		
	Canals in Tala, &c.	...	...	...	...	2,386	327	2,621	811	—	3,434	991	5,532	4,125	6,228	707	...	4,601																	
	Shal Canals	...	...	...	...	3,734	371	4,123	1,223	—	5,344	991	7,532	6,125	9,230	...	5,542																		
	Pinjra	5,509	5,417	—	8,297	21,833	6,639	31,592	9,603	—	40,985	25,370	55,109	36,512	10,763	12,174	...	59,903																	
	Canals in Mirpur	...	...	...	...	4,745	695	6,154	1,415	—	6,145	2,635	8,799	4,751	1,406	2,635	...	8,799																	
	Canals in Sajawal	...	...	...	...	1,115	122	1,327	389	—	1,600	1,946	2,749	1,302	386	6,065	...	2,749																	
	Satta	...	...	...	...	627	499	4,211	211	—	4,399	1,536	2,766	2,111	398	2,354	...	2,766																	
	Canals in Jali	...	...	...	...	1,331	331	3,331	336	—	3,724	294	7,380	1,331	393	863	...	4,219																	
	Khanra	...	...	...	...	1,914	601	2,645	779	—	3,385	1,218	4,506	2,618	779	1,218	...	4,506																	
	Kakawari	...	...	...	...	2,794	290	2,981	179	—	3,218	1,218	8,800	2,166	760	2,272	...	3,218																	
	Canals in Bakhshand	...	...	...	...	1,370	...	1,370	609	—	3,773	260	1,361	1,270	609	389	...	1,361																	
Bounds left Bank	7,336	2,133	19	9,778	48,728	4,838	53,388	16,361	101	69,843	29	69,900	58,132	97,375	29	...	76,132																		
Bounds right Bank	389	601	—	628	16,474	4,161	19,674	5,541	33	25,448	6	25,451	9,904	5,307	6	...	25,451																		
	21,058	6,272	12	27,298	49,797	23,574	6,53,171	45,613	799	1,98,415	32,619	2,31,104	1,74,250	81,544	32,619	...	2,31,104																		
Total, Minor Works, Revenue Accounts only																			1,12,416	29,200	483	1,42,102	1,61,322	71,633	4,22,849	4,13,763	310	5,12,072	2,24,204	7,52,099	9,73,374	1,39,600	2,24,664	...	9,52,129
AGRICULTURAL WORKS.																																			
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.																																			
In Operation.																																			
Ganges Canal District.	Kashmor Band	5,008	1,108	11	6,210	79,359	9,389	53,678	9,909	91	65,012	556	45,505	13,678	10,474	556	...	61,808																	
	Kashimpor Band	...	...	...	...	4,076	750	1,526	438	...	1,284	...	2,264	1,526	128	...	...	2,264																	
		Sukkur Begun Band	...	...	...	...	20,746	5,410	26,159	6,376	...	32,734	...	37,334	24,158	6,576	...	39,734																	
Indus-Flood Survey	700	2,375	231	3,122	...	...	...	...	...	...	...	...	...	780	2,637	...	...	3,417																	
		700	2,375	231	3,122	21,874	6,960	27,994	7,804	...	35,918	...	39,018	19,772	9,600	...	...	39,413																	

TABLE IV—concluded.

REVENUE EXPENDITURE.													TOTAL EXPENDITURE.						
Canals and Executive Districts.	Improvements.				Maintenance and repairs.							Revenue Collection charges.	Total Columns 6 to 11.	Establishment.				Indirect charges.	Total.
	Works.	Regular Estab-lishment.	Tools and Plant.	Total.	Clearance Expenditure.			Regular Estab-lishment.	Tools and Plant.	Total.	Works.			Public Works Department (in-cluded Tools and Plant.	Civil Depart-ment Collec-tion charges.				
					Works.	Work Estab-lishment.	Total.												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
AGRICULTURAL WORKS —continued.																			
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT—continued.																			
In Operation—continued.																			
Ghar Canals District.	Ghar Bunds ...	1,474	368	7	1,849	3,745	4,629	8,351	2,099	30	10,452	...	10,452	6,926	2,503	...	12,331		
Western Nara District.	Nara Bunds ...	15,022	3,755	45	18,822	7,773	2,139	9,912	2,473	30	12,420	...	12,420	24,931	6,308	...	31,242		
Eastern Nara District.	Jamrao Canal Survey.	1,428	5,820	62	7,871	...	...	...	...	...	...	...	...	1,428	6,443	...	7,871		
Hyderabad District.	Pay and allowance of Officers who served on Sind Irrigation committee ...	...	...	...	...	...	...	...	15	...	15	...	...	...	15	...	15		
Karachi District.	Mathematical Instrument Depot, Sind ...	...	720	9,34	10,074	...	...	...	...	...	...	...	...	...	10,074	...	10,074		
	Superintending Engineer's Office...	...	203	203	...	...	...	...	...	...	...	...	...	...	203	...	203		
	Before Operation.	23,717	14,236	10,501	48,454	62,611	22,317	84,928	20,893	161	1,05,971	556	1,06,523	1,08,645	45,786	556	1,54,857		
* Expenditure before Improve-ments—																			
Regir Canals District.	Regir Canals ...	...	...	...	5,383	...	5,383	13	...	5,396	3,361	8,757	...	5,383	13	3,361	8,757		
Eastern Nara District.	Eastern Nara ...	...	...	...	...	...	...	...	...	...	314	314	...	...	314	...	314		
Ghar Canals District.	Sukkur Canal ...	...	...	...	4,921	...	4,921	754	...	4,775	8,481	13,256	...	4,921	754	8,481	13,256		
	Ghar Canal ...	...	...	...	4,135	...	4,135	994	...	5,129	13,551	18,680	...	4,135	994	13,551	18,680		
	...	...	...	...	8,156	...	8,156	1,748	...	9,904	22,032	31,936	...	8,156	1,748	22,032	31,936		
Hyderabad District.	Mehrabadh ...	...	...	...	3,445	...	3,445	917	...	4,370	2,656	7,028	...	3,445	925	2,658	7,053		
	Alibhar Kacheri ...	...	...	...	5,988	...	5,988	1,340	...	7,328	1,750	9,078	...	5,988	1,340	1,750	9,078		
	Mirak ...	...	...	...	13,957	...	13,957	3,947	...	17,034	5,944	22,978	...	13,957	3,947	5,944	22,978		
	Sarfaraz ...	...	...	...	4,557	...	4,557	1,213	...	5,770	1,881	7,651	...	4,557	1,213	1,881	7,651		
	...	...	...	...	27,917	...	27,917	6,517	...	34,503	12,263	46,765	...	27,917	6,525	12,263	46,765		
Fuleli Canals District.	Fuleli Canal ...	...	...	...	74,842	...	74,842	14,969	...	89,811	21,454	1,14,265	...	74,842	14,969	21,454	1,14,265		
	Total Old Expenditure	...	...	...	1,16,258	...	1,16,258	23,247	...	1,39,818	62,451	2,02,067	...	1,16,258	23,247	62,454	2,02,067		
	Total Agricultural	23,717	14,236	10,501	48,454	1,78,969	22,317	2,01,286	44,132	173	2,45,599	65,010	3,08,600	2,25,003	69,041	63,010	3,57,074		
Regir Canals District	...	32,533	9,758	69	42,410	98,426	21,900	1,20,326	31,652	410	1,55,398	56,123	2,11,521	1,52,879	44,929	56,123	2,59,236		
Bhikapur Canals District	...	1,394	2,544	260	4,198	70,929	16,737	87,693	24,746	295	1,12,717	50,161	1,62,878	89,630	27,855	50,161	1,67,049		
Ghar Canals District	...	5,736	1,060	18	6,814	84,748	9,730	1,05,478	32,151	442	1,38,071	91,597	2,31,968	1,09,214	39,628	94,877	2,41,965		
Western Nara District	...	1,24,172	23,068	576	1,47,816	71,121	15,346	86,467	17,107	432	1,03,009	70,180	1,73,186	2,16,635	41,213	70,180	2,34,032		
Eastern Nara District	...	10,257	5,964	69	16,290	61,670	25,800	87,470	5,067	437	92,962	47,229	1,40,191	97,727	12,098	47,229	1,57,779		
Hyderabad Canals District	...	17,036	6,638	32	23,706	1,32,899	25,638	1,58,437	34,183	142	1,92,620	84,235	2,76,713	1,76,275	80,671	83,235	3,41,778		
Fuleli Canals District	...	11,361	2,832	41	14,234	1,23,538	19,637	1,43,200	39,740	377	2,13,297	68,077	2,74,344	1,86,501	42,361	63,077	2,95,065		
Karachi Canals District	...	21,055	6,972	9,515	37,542	1,23,797	33,374	1,57,171	45,013	28	1,95,485	32,619	2,31,104	1,74,229	61,821	32,619	2,95,068		
	Total	2,42,439	68,957	11,081	2,92,480	8,08,148	1,72,972	9,90,215	2,53,277	1,897	12,35,384	5,00,561	17,39,945	12,92,654	3,25,210	5,63,561	20,46,099		

*Adjusted as per Bombay Government Resolution No. 77 A.1.—of 1883.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE V.

Cultivation, Canal Revenue and Expenditure for 1892-93, as contrasted with three previous years.

Canals and Executive Districts.	AVERAGE OF THREE PREVIOUS YEARS.					Per-centage of expenditure on Revenue.	Cost of Maintenance per acre.	1892-93.			Per-centage of expenditure on Revenue.	Cost of Maintenance per acre.	LENGTH IN MILES.				
	Cultivation.	Canal Revenue.	Maintenance and Revenue collection.	Cultivation.	Canal Revenue.			Maintenance and Revenue collection.	Canals.				Bunds.	Total.			
									Main Canals.	Branches.					Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
MAJOR WORKS.																	
PRODUCTIVE WORKS.																	
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.																	
Canals in Operation.																	
Pecari Canal (Desert Canal ...)	101,208	1,41,235	56,680	40.12	0.5	95,756	1,27,725	67,877	53.14	0.7	75	117	102	...	192		
District. (Taharwah ...)	24,015	39,284	15,578	34.57	0.5	25,272	42,011	15,332	36.50	0.7	39	31	67	...	67		
(Begri ...)	167,417	2,87,173	72,562	24.92	0.4	162,524	3,45,216	70,957	20.55	0.4	76	100	176	...	176		
	296,281	4,77,597	1,42,820	29.92	0.4	310,657	5,14,952	1,54,166	29.96	0.5	187	218	455	...	435		
(Nara Supply Chan- ...)	8,815	25,512	4,124	20.30	0.5	12,621	39,903	5,033	12.60	0.4	12	...	12	...	12		
Eastern Nara. (Eastern Nara ...)	55,942	85,719	29,506	34.43	0.5	46,917	73,845	24,575	33.06	0.9	...	...	...	...	...		
District. (Mithra Canal ...)	11,268	2,45,175	64,712	26.39	0.5	121,332	2,51,572	58,461	23.25	0.5	62	153	93	...	248		
(Dandah ...)	8,019	14,550	4,271	25.35	0.5	6,574	19,329	5,005	26.00	0.5	28	...	28	...	28		
(Hemawah ...)	2,475	5,190	596	11.55	0.2	2,717	5,484	568	10.94	0.2	3	...	3	...	3		
(Kubera Canal ...)	7,681	12,069	2,968	24.34	0.4	7,192	10,857	3,712	34.10	0.5	15	...	15	...	15		
(Thar Canal ...)	42,703	87,954	20,999	23.97	0.5	46,830	91,591	24,268	26.53	0.5	24	41	65	...	98		
	241,818	4,70,959	1,27,116	26.99	0.5	243,412	4,85,821	1,39,847	28.59	0.5	175	108	278	...	332		
Total, Major Works ...	558,049	9,48,386	2,69,556	29.47	0.5	554,369	10,00,573	2,94,013	29.98	0.5	362	361	713	...	962		
MINOR WORKS—IRRIGATION AND NAVIGATION.																	
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.																	
Canals in Operation.																	
Ghar Canals (Sukkar Canal ...)	58,903	2,16,049	30,009	19.06	0.4	88,758	2,17,000	41,943	19.55	0.5	74	58	132	...	132		
District. (Ghar Canal ...)	242,860	6,95,997	1,50,073	21.59	0.6	5,53,633	7,40,561	1,49,647	30.19	0.6	46	250	296	...	296		
	331,823	9,11,138	1,89,082	20.75	0.5	344,311	9,58,260	1,90,590	19.59	0.6	120	308	428	...	428		
(Mehardindh ...)	18,874	25,108	15,300	61.93	1.1	11,351	20,625	—244	—1.18	...	29	14	43	...	43		
Hyderabad Canals District. (Eastern Kacheri ...)	10,123	12,499	6,300	34.71	0.6	10,972	20,408	—2,512	—12.46	—0.2	21	35	56	...	56		
(Marak ...)	52,036	1,01,998	37,101	37.29	0.7	58,786	1,19,140	22,005	19.97	0.4	23	100	123	...	123		
(Saridawah ...)	26,189	39,575	18,513	49.30	0.7	29,720	44,078	13,200	29.93	0.4	82	40	122	...	122		
	108,037	1,84,180	79,093	42.99	0.7	110,779	2,04,233	33,019	16.17	0.3	155	249	464	...	465		
(Fuleli ...)	326,307	6,04,371	2,53,375	41.92	0.5	331,974	6,08,133	1,30,697	21.67	0.4	98	907	1,005	...	1,005		
Total, Minor Works, Capital and Revenue Accounts ...	761,167	16,99,697	5,21,471	30.08	0.7	787,064	17,63,645	3,54,306	20.07	0.5	373	1,464	1,837	...	1,837		
MINOR WORKS—IRRIGATION AND NAVIGATION.																	
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.																	
Canals in Operation.																	
Sikandarpur Canals District. (Canals in Rohri ...)	73,763	1,87,109	69,442	37.11	0.9	131,979	3,47,883	86,922	24.96	0.7	229	7	236	...	236		
(Sind Canal ...)	67,627	1,81,101	40,508	22.58	0.6	67,677	1,87,117	37,413	19.99	0.6	43	47	90	...	90		
	141,290	3,68,246	1,13,743	30.38	0.8	199,656	5,34,308	1,27,960	23.93	0.6	272	54	326	...	326		
(Nara ...)	217,109	5,00,093	1,09,990	19.43	0.5	239,279	5,90,231	1,21,356	21.07	0.5	146	302	348	...	348		
Manchar ...	2,996	6,903	...	...	...	12,803	33,021	...	...	...	...	...	...	...	...		
(Aral ...)	2,720	7,526	...	...	...	18,081	26,118	...	...	...	17	...	...	...	17		
Western Nara District. (Pir-bhard Canal ...)	3,700	10,577	11,397	110.92	3.1	10,219	26,210	26,424	100.82	2.6	23	16	39	...	39		
(Wahur ...)	6,439	15,526	3,945	24.92	0.6	5,149	12,374	1,719	13.98	0.3	5	...	...	...	5		
(Marsi ...)	4,158	12,234	3,406	27.84	0.8	4,863	14,607	2,318	15.77	0.5	18	...	...	...	18		
(Pillita ...)	7,692	15,596	4,927	30.92	0.6	11,774	25,468	6,817	26.77	0.6	41	...	...	...	41		
(New Feder, West- ...)	...	...	...	...	...	1,442	3,732	...	...	...	8	...	...	...	8		
(Dadu Canals ...)	7,661	14,000	6,141	45.58	0.8	16,456	37,318	12,132	32.51	0.7	16	22	38	...	38		
	252,623	6,48,726	1,39,715	31.54	0.5	319,025	7,71,071	1,73,766	22.54	0.5	274	240	514	...	514		
(Nasrat ...)	25,307	33,829	23,236	39.73	0.9	26,839	61,459	14,453	23.32	0.5	31	36	67	...	67		
Nasirabad District. (Nasirabad ...)	52,334	1,13,058	33,882	31.08	0.7	52,983	1,11,995	20,145	17.99	0.4	33	111	144	...	144		
(Dandah ...)	11,675	20,099	10,888	47.73	0.9	12,701	25,442	9,324	32.71	0.7	29	35	64	...	64		
(Renawah ...)	33,806	58,722	22,616	38.51	0.7	36,567	63,776	22,440	44.40	0.8	35	82	117	...	117		
(Gharo Mahnuda ...)	16,147	30,850	15,329	40.98	0.9	20,159	39,371	9,341	23.79	0.5	24	112	136	...	136		
(Kari Shumali ...)	32,412	64,976	23,108	34.92	0.5	35,449	61,263	21,783	35.66	0.6	37	154	191	...	191		
(Nasirabad ...)	30,247	57,593	22,725	39.45	0.7	32,659	55,012	20,359	50.61	1.0	27	102	129	...	129		
(Other Canals ...)	29,016	59,997	24,259	40.03	0.6	33,116	69,500	19,321	27.74	0.6	39	46	124	...	124		
	310,352	5,89,032	2,32,206	39.69	0.7	321,625	6,34,904	2,15,914	34.01	0.7	357	889	1,236	...	1,236		
(Other Canals ...)	24,428	51,158	20,785	52.35	1.1	19,490	34,727	23,676	82.58	1.5	74	72	146	...	146		
(Hajirabad ...)	...	...	1,961	...	...	...	...	4,706	...	...	...	...	...	...	...		
	24,428	51,158	22,746	50.19	1.1	19,490	34,727	23,382	96.70	1.7	74	72	146	...	146		

TABLE V—continued.

Canals and Executive Districts.	AVERAGE OF THREE PREVIOUS YEARS.						1926-27.				EXPENDITURE IN HINDUS.				
	Cultivation.	Canal Revenue.	Maintenance and Revenue Collection.	Percentage of expenditure on Revenue.	Cost of Maintenance per Acre.	Per Acre.	Cultivation.	Canal Revenue.	Maintenance and Revenue Collection.	Percentage of expenditure on Revenue.	Cost of Maintenance per Acre.	Canals.			Total.
												Main Canals.	Branches.	Bunds.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MINOR WORKS—IRRIGATION AND NAVIGATION—contd.															
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.															
<i>Canals in Operation—continued.</i>															
Canals north of Kotri ...	12,120	24,500	9,490	38.71	0.9	9,417	17,174	9,431	54.91	1.0	56	...	58	...	88
Kalri ...	12,483	26,869	10,427	38.81	1.2	10,052	21,311	11,107	51.65	0.9	26	100	129	...	126
Bughar ...	26,025	52,231	23,523	45.03	1.0	26,308	49,314	24,373	49.22	0.9	31	69	150	...	150
Uchita ...	31,115	22,022	2,732	12.39	0.2	9,673	14,330	1,761	12.28	0.2	31	3	37	...	57
Canals in Tatta, &c. ...	11,227	19,797	11,909	60.15	0.9	7,227	10,912	4,561	41.80	0.6	84	11	93	...	95
Shal Canals ...	6,011	6,185	3,538	57.23	1.3	2,640	2,923	2,542	86.98	2.1	9	2	11	...	11
Pinjari ...	72,773	106,154	68,886	64.81	0.9	72,562	1,25,180	63,108	50.38	0.7	65	277	315	...	315
Canals in Mirpur Baisno ...	16,172	37,538	12,479	33.24	0.8	15,648	31,816	8,799	27.63	0.6	15	23	26	...	70
Canals in Sujawal, &c. ...	2,770	14,392	5,359	37.26	0.7	8,532	10,438	2,719	26.04	0.3	23	19	35	...	35
Satta ...	10,003	18,534	6,429	34.70	0.6	9,469	13,250	2,793	21.02	0.3	28	10	38	...	38
Canals in Jati ...	2,275	4,904	1,720	34.60	0.7	3,913	5,502	2,319	42.15	0.6	11	...	11	...	11
Khanta ...	5,108	11,421	10,332	90.53	1.9	4,844	10,099	4,594	45.57	0.9	23	16	39	...	39
Kokawari ...	13,431	30,582	7,913	25.87	0.6	10,730	22,596	6,620	29.28	0.5	18	61	82	...	82
Canals de Shikhar ...	2,383	4,535	3,194	70.45	1.4	2,070	3,802	2,164	56.90	1.0	29	...	29	...	29
Bandar ...	319	179	12,559	23,660.50	128.9	278	74	60,369	30,983.51	240.5	...	...	...	91	91
Bunds, right bank ...	800	413	12,357	5,413.31	27.9	427	227	25,454	1,781.90	59.6	...	...	...	63	63
Total, Minor Works, Revenue Accounts only ...	267,287	4,40,112	2,52,504	56.75	1.2	104,732	3,40,047	3,31,101	97.08	1.2	539	557	1,126	154	1,260
AGRICULTURAL WORKS.															
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.															
<i>In Operation.</i>															
Begari Canals ...	4,546	8,671	25,532	58.78	7.8	3,691	5,268	48,559	924.51	43.7	...	...	...	48	48
Shikhar Canal District ...	...	5	715	14,000.00	...	...	5	2,354	5,600.00	...	...	...	...	10	10
Shikhar Canal District ...	...	134	26,314	3,601.58	...	...	233	32,721	11,560.78	...	...	...	...	34	34
Shikhar Canal District ...	...	739	29,059	3,937.20	...	...	588	35,018	2,150.03	...	...	...	...	41	41
Ghar Canal District ...	...	112	9,880	8,773.21	...	...	37	10,482	28,329.72	...	...	...	...	43	43
Western Nara ...	...	81	15,501	19,248.15	...	...	37	12,439	21,789.47	...	...	...	...	65	65
Total, Agricultural Works ...	4,546	9,603	10,008	937.29	19.8	3,691	6,320	1,06,518	1,677.45	34.4	...	...	...	200	200
Begari Canals District ...	300,774	4,86,968	1,72,352	35.42	0.5	314,051	5,30,020	2,11,521	40.46	0.7	187	248	435	48	483
Shikhar Canal District ...	184,290	3,06,053	1,42,902	46.78	1.0	180,646	5,31,267	1,02,078	30.45	0.8	272	51	326	64	410
Ghar Canal District ...	321,833	9,11,248	1,80,819	21.03	0.6	344,311	9,68,272	2,33,698	24.31	0.7	120	306	426	43	471
Western Nara District ...	252,322	6,48,817	1,05,392	16.25	0.6	216,025	7,71,128	1,86,196	24.11	0.6	274	240	514	85	519
Eastern Nara District ...	241,818	4,00,039	1,27,136	31.59	0.5	249,412	4,85,021	1,40,991	29.67	0.6	175	103	278	204	582
Hyderabad Canal District ...	815,268	7,73,222	2,12,969	27.53	0.7	837,304	8,85,116	2,05,713	23.24	0.7	462	1,134	1,630	1	1,631
Fuleli Canal District ...	320,725	6,45,029	2,92,121	45.25	0.8	331,461	6,37,800	2,73,344	42.64	0.9	172	979	1,151	12	1,263
Karachi Canals District ...	207,267	4,40,112	2,52,504	57.00	1.2	194,732	3,40,061	2,31,104	67.90	1.2	539	557	1,126	154	1,260
Total ...	2,329,641	47,61,920	16,30,810	34.72	0.7	2,396,053	50,88,325	17,88,945	34.18	0.7	2,231	3,657	5,888	661	7,549

* Includes old expenditure which has not been shown in body of this table; for details see Table IV.

Agricultural Receipts ...

11

100,98,336

* Irrigation share of assessment

Rs.

Hokas actuals ...

49,08,000

Miscellaneous actuals ...

1,15,469

164,486

Includes agricultural receipts.

Total ...

10,57,235

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE VI.

Direct and Indirect Canal Revenue for 1892-93.

Canals and Executive Districts.	Water-share of net consolidated Revenue assessed.	Deduct average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakika and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MAJOR WORKS.						
PRODUCTIVE WORKS.						
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.						
<i>Canals in Operation.</i>						
Begari Canals District ... { Desert Canal	99,004	...	99,004	28,722	956	1,28,682
... { Unharwah	42,008	...	42,008	3	1,266	43,277
... { Begari	8,15,606	33,613	2,81,992	29,610	4,079	3,18,681
	4,56,617	33,613	4,23,004	58,335	6,301	4,87,640
Eastern Nara District ... { Nara Supply Channel	29,303	...	29,303	9,600	9	38,912
... { Eastern Nara	66,830	3,444	63,386	7,015	16	70,417
... { Mithrao Canal	2,50,031	...	2,50,031	1,541	50	2,51,622
... { Dinwah	13,269	...	13,269	60	12	13,341
... { Heranwah	5,494	...	5,494	...	...	5,494
... { Khupra Canal	10,836	...	10,836	51	...	10,887
... { Thar Canal	69,607	...	69,607	1,984	...	71,591
	4,65,370	3,444	4,61,926	20,251	87	4,82,364
Total, Major Works ...	9,21,987	37,057	8,84,930	78,586	6,388	9,69,904
MINOR WORKS—IRRIGATION AND NAVIGATION.						
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in Operation.</i>						
Ghar Canals District ... { Sukkur Canal	2,15,331	84,806	1,30,525	2,368	430	1,33,323
... { Ghar Canal	7,30,811	1,35,512	5,95,299	9,750	2,378	6,07,427
	9,46,142	2,20,318	7,25,824	12,118	2,808	7,40,750
Hyderabad Canals District. { Mehrabwah	20,544	26,579	—6,335	81	264	—5,990
... { Alibhar Kacheri	19,906	17,505	2,401	502	207	3,110
... { Marak	1,16,397	59,437	56,960	2,743	660	60,363
... { Sarfraz	42,361	18,806	23,555	1,718	479	25,732
	1,99,208	1,32,627	76,581	5,044	1,610	83,235
Fuleli Canals District ... Fuleli	5,75,586	2,41,549	3,31,037	27,547	1,952	3,60,536
Total, Minor Works, Capital and Revenue Accounts ...	17,20,936	5,87,494	11,33,442	44,709	6,370	11,84,521
MINOR WORKS—IRRIGATION AND NAVIGATION.						
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in Operation.</i>						
Shikarpur Canals District. { Canals in Rohri	3,42,339	...	3,42,339	5,544	1,816	3,49,699
... { Bunds in Rohri	...	...	...	28	...	28
... { Sind Canal	1,83,641	...	1,83,641	3,476	669	1,87,776
	5,25,980	...	5,25,980	9,048	2,475	5,37,503
Western Nara District ... { Nara	5,75,153	...	5,75,153	18,810	1,591	5,95,554
... { Manchar	33,021	...	33,021	...	...	33,021
... { Aral	27,212	...	27,212	898	...	28,110
... { Pritchard Canal	26,013	...	26,013	197	402	26,612
... { Wahur	12,355	...	12,355	19	31	12,405
... { Marvi	14,190	...	14,190	417	187	14,794
... { Phitta	24,589	...	24,589	879	362	25,830
... { Dadu Canals	37,077	...	37,077	241	311	37,629
	7,49,610	...	7,49,610	21,461	2,884	7,73,955
Hyderabad Canals District. { Nasrat	60,748	...	60,748	711	421	61,880
... { Naolakhi	1,10,780	...	1,10,780	1,215	311	1,12,306
... { Dambro	24,935	...	24,935	507	186	25,628
... { Dadwah	61,649	...	61,649	2,127	605	64,381
... { Renwah	38,533	...	38,533	838	178	39,549
... { Gharo Mahmuda	1,37,646	...	1,37,646	6,400	556	1,44,422
... { Kari Shumali	58,496	...	58,496	2,767	373	61,796
... { Nasirwah	57,074	...	57,074	938	384	58,396
... { Other Canals	68,795	...	68,795	705	284	69,784
	6,18,656	...	6,18,656	16,208	3,278	6,38,142
Fuleli Canals District ... { Other Canals	34,238	...	34,238	480	85	34,812
... { Hajipur Bund	...	...	...	...	...	...
	34,238	...	34,238	480	85	34,812

TABLE VI—continued.

Canals and Executive Districts.	Water-share of net consolidated Revenue assessed.	Deduct average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakdaba and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MINOR WORKS—IRRIGATION AND NAVIGATION—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.						
<i>Canals in Operation—continued.</i>						
Canals, north of Kotri...	16,607	...	16,607	567	146	17,320
Kalri ...	20,751	...	20,751	760	26	21,537
Baghar ...	46,553	...	46,553	1,791	42	48,386
Uchita ...	15,003	...	15,003	336	73	15,412
Canals in Tatta, &c. ...	9,899	...	9,899	1,013	11	10,923
Shal Canals ...	2,001	...	2,001	22	2	2,025
Pinyari ...	1,22,410	...	1,22,410	3,080	511	1,25,951
Karachi Canals District ...	31,773	...	31,773	43	166	31,982
Canals in Mirpur Batoro ...	10,295	...	10,295	143	73	10,511
Canals in Sujawal ...	13,281	...	13,281	9	40	13,330
Satta ...	5,886	...	5,886	11	8	5,905
Canals in Jati ...	10,941	...	10,941	63	16	11,020
Khanta ...	21,812	...	21,812	774	54	22,640
Kokawari ...	3,775	...	3,775	117	8	3,900
Canals in Shāhbāndar ...	...	...	...	138	...	138
Bunds, left bank ...	...	...	...	263	...	263
Bunds, right bank ...	...	...	...	...	...	...
	3,30,987	...	3,30,987	9,080	1,176	3,41,243
Total, Minor Works, Revenue Accounts only ...	22,59,471	...	22,59,471	56,286	9,888	23,25,655
AGRICULTURAL WORKS.						
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.						
<i>In Operation.</i>						
Begāri Canals District ... Kashmir Bund ...	5,606	...	5,606	362	228	6,196
Shikārpur Canals District ... { Kāsimpur Bund ...	...	...	...	5	...	5
Shikārpur Canals District ... { Sukkur Begāri Bund ...	...	...	...	288	...	288
	...	...	...	288	...	288
Ghār Canals District ... Ghār Bund ...	...	...	...	37	...	37
Western Nāra District ... Nāra bund ...	...	...	...	57	...	57
Total, Agricultural Works ...	5,606	...	5,606	744	228	6,578
Average revenue before improvements, vide Bombay Government Resolutions Nos. 359 and 598, dated 28th February and 13th April 1893.						
Begāri District ... Begāri Canal ...	33,613	...	33,613	...	...	33,613
Eastern Nāra District ... Eastern Nāra ...	3,444	...	3,444	...	...	3,444
Ghār District ... { Sukkur Canal ...	84,806	...	84,806	...	...	84,806
Ghār District ... { Ghār Canal ...	1,35,512	...	1,35,512	...	...	1,35,512
	2,20,318	...	2,20,318	...	...	2,20,318
Hyderabad Canals District, { Mehārbāwah ...	26,879	...	26,879	...	...	26,879
Hyderabad Canals District, { Alibhar Kacheri ...	17,505	...	17,505	...	...	17,505
Hyderabad Canals District, { Mārāk ...	59,437	...	59,437	...	...	59,437
Hyderabad Canals District, { Sarfrāz ...	18,816	...	18,816	...	...	18,816
	1,22,627	...	1,22,627	...	...	1,22,627
Fuleli District ... Fuleli ...	2,44,549	...	2,44,549	...	...	2,44,549
	6,24,551	...	6,24,551	...	...	6,24,551
Total, Agricultural ...	6,30,157	...	6,30,157	744	228	6,31,129
				11		11
				755		6,31,140
Begāri Canals District ...	4,95,836	33,613	4,62,223	58,697	6,529	5,27,449
Shikārpur Canals District ...	5,25,980	...	5,25,980	9,336	2,475	5,37,791
Ghār Canals District ...	11,66,460	2,20,318	9,46,142	13,155	2,808	9,61,105
Western Nāra Canals District ...	7,49,610	...	7,49,610	21,518	2,884	7,74,012
Eastern Nāra Canals District ...	4,68,884	3,444	4,65,370	20,251	87	4,85,708
Hyderabad Canals District ...	9,40,491	...	8,17,861	21,232	4,888	8,44,034
Fuleli Canals District ...	8,54,373	2,44,549	6,09,824	28,036	2,037	6,39,897
Karachi Canals District ...	3,30,987	...	3,30,987	9,080	1,176	3,41,243
	55,32,551	6,24,551	49,08,000	1,80,325	22,884	51,11,209
Add Agricultural Receipts ...	...	...	...	11	...	11
	55,32,551	6,24,551	49,08,000	1,80,336	22,884	51,11,220

NOTE.—The figures in column 4 are assessments; the rest are actuals.

* Inclusive of refunds of revenue of Rs. 2,830, the details of which are not available, hence they have not been deducted from this table.

H: M. THOMPSON, M.Inst.C.E.,

Superintending Engineer, Indus Left Bank Division.

TABLE VI-A.

Actual Direct and Indirect Receipts of Canal Revenue in 1892-93, as shown in General Revenue Accounts of Executive Districts prepared by Examiner, Public Works Accounts.

Canals and Executive Districts.	Water-share of net consolidated Revenue collected.	Deduct average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts Raikhs and Miscellaneous.	Receipts from Sales of Occu-pancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MAJOR WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
PRODUCTIVE WORKS.						
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.						
<i>Canals in Operation.</i>						
Begdri Canals District ... { Desert Canal	98,596	...	98,596	28,722	966	1,28,274
Unharwah	46,093	...	46,093	3	1,286	47,362
Begdri	3,68,739	33,613	3,35,126	29,610	4,079	3,68,815
	5,13,428	33,613	4,79,815	58,335	6,301	5,44,461
Eastern Nara District ... { Nara Supply Channel	28,226	...	28,226	9,600	9	37,835
Eastern Nara	65,564	3,444	62,140	7,015	16	69,171
Mithrao Canal	2,49,946	...	2,49,946	1,541	50	2,51,537
Dimwah	13,222	...	13,222	60	12	13,294
Horanwah	5,683	...	5,683	...	...	5,683
Khipra Canal	10,999	...	10,999	51	...	11,050
Thar Canal	89,809	...	89,809	1,984	...	91,793
	4,63,469	3,444	4,60,025	20,251	87	4,60,363
Total, Major Works ...	8,76,397	37,057	8,39,340	78,586	6,388	10,24,814
MINOR WORKS—IRRIGATION AND NAVIGATION.						
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in Operation.</i>						
Ghâr Canals District ... { Sukkur Canal	2,11,182	84,806	1,26,376	2,368	139	1,29,474
Ghâr Canal	7,30,630	1,35,512	5,95,118	9,750	2,373	6,07,246
	9,41,812	2,20,318	7,21,494	12,118	2,506	7,36,470
Hyderabad Canal District. { Mehrabwah	20,543	26,679	—6,336	81	264	—5,991
Alibhar Kacheri	49,865	17,306	2,330	502	207	5,089
Marak	1,16,374	58,437	56,937	2,743	660	60,340
Safarwah	32,312	38,806	23,606	1,718	479	25,703
	1,39,444	1,22,622	16,381	5,044	1,610	63,441
Fuleli Canals District ... { Fuleli	5,75,759	2,34,545	3,31,210	24,718	3,962	3,57,880
Total, Minor Works, Capital and Revenue Accounts ...	37,16,685	5,87,494	11,29,191	41,880	6,370	19,77,441
MINOR WORKS—IRRIGATION AND NAVIGATION.						
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.						
<i>Canals in Operation.</i>						
Shikarpur Canals District. { Canals in Rohri	3,20,491	...	3,20,491	5,544	1,816	3,27,851
Canals in Rohri	...	...	...	28	...	28
Sind Canal	1,75,583	...	1,75,583	3,476	659	1,79,723
	4,96,079	...	4,96,079	9,048	2,475	5,07,602
Western Nara District ... { Nara	5,72,760	...	5,72,760	18,809	1,591	5,93,160
Manchar	22,233	...	22,233	...	...	22,233
Aral	27,116	...	27,116	898	...	28,014
Reichard Canal	26,709	...	26,709	197	402	26,308
Wahur	12,354	...	12,354	19	31	12,404
Marvi	14,187	...	14,187	417	187	14,791
Phitta	24,603	...	24,603	879	362	25,844
Dadu Canals	37,061	...	37,061	241	311	37,613
	7,46,123	...	7,46,123	21,460	2,884	7,70,467
Hyderabad Canals District { Nasrat	60,725	...	60,725	711	421	61,857
Nasolaki	1,10,761	...	1,10,761	1,215	311	1,12,287
Dambro	24,933	...	24,933	567	186	25,686
Dodwah	61,593	...	61,593	2,127	605	64,325
Kewrah	38,528	...	38,528	388	173	39,541
Gharo Mahunda	1,37,444	...	1,37,444	6,400	376	1,44,226
Kari Shumali	58,426	...	58,426	2,767	582	61,726
Nasirwah	57,056	...	57,056	938	384	58,378
Other Canals	68,743	...	68,743	706	281	69,732
	6,16,206	...	6,16,206	16,208	3,278	6,37,692
Fuleli Canals District ... { Other Canals	30,729	...	30,729	498	85	31,383
Hajipur Band	...	...	...	...	...	...
	30,729	...	30,729	498	85	31,303

TABLE VI-A—continued.

Canals and Executive Districts.	Water-share of net consolidated Revenue collected.	Direct average before Improvement.	Balance Irrigation share due to Canals.	Direct Receipts Hakia and Miscellaneous.	Receipts from Sale of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5	6	7
MINOR WORKS—IRRIGATION AND NAVIGATION—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.						
<i>Canals in Operation—continued.</i>						
Canals north of Kotri...	16,710	...	16,710	567	146	17,423
Kalri ...	20,264	...	20,264	760	26	21,050
Baghar ...	44,436	...	44,436	1,791	42	46,269
Uchita ...	15,362	...	15,362	336	73	15,771
Canals in Tatta, &c. ...	8,136	...	8,136	1,013	11	9,160
Shal Canals ...	1,965	...	1,965	22	2	1,989
Pinyari ...	1,19,981	...	1,19,981	3,030	511	1,23,522
Karachi Canals District ...	26,351	...	26,351	43	166	26,560
Canals in Mirpur Batoro ...	10,417	...	10,417	148	73	10,633
Satta ...	13,536	...	13,536	9	40	13,585
Canals in Jati ...	5,935	...	5,935	11	8	5,954
Khanta ...	11,124	...	11,124	63	16	11,203
Kokavari ...	21,962	...	21,962	774	54	22,790
Canals in Shahbandar ...	3,774	...	3,774	147	8	3,899
Bunds, left bank ...	...	...	...	138	...	138
Bunds, right bank ...	...	...	...	263	...	263
	3,19,953	...	3,19,953	9,080	1,176	3,30,209
Total, Minor Works, Revenue Accounts only ...	22,11,080	...	22,11,080	56,285	9,896	22,77,273
AGRICULTURAL WORKS.						
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.						
<i>In Operation.</i>						
Begari Canals District ... Kashmir Bund ...	5,563	...	5,563	362	228	6,153
Shikarpur Canals District. { Kasmipur Bund ...	...	...	...	5	...	5
{ Sakkur Begari Bund ...	...	...	...	263	...	263
	...	...	...	288	...	288
Ghar Canals District ... Ghar Bund ...	...	...	...	37	...	37
Western Nara District ... Nara Bund ...	...	...	...	57	...	57
Total ...	5,563	...	5,563	744	228	6,535
Average Revenue before improvements vide Bombay Government Resolutions No. 359 and 598 dated 28th February and 13th April 1898.						
Begari Canals District ... Begari Canal ...	33,613	...	33,613	...	...	33,613
Eastern Nara District ... Eastern Nara ...	3,444	...	3,444	...	...	3,444
Ghar Canals District { Sakkur Canal ...	84,806	...	84,806	...	...	84,806
{ Ghar Canal ...	1,35,512	...	1,35,512	...	...	1,35,512
	2,20,318	...	2,20,318	...	...	2,20,318
Hyderabad Canals District { Mehrabwah ...	26,879	...	26,879	...	...	26,879
{ Alibhar Kacheri ...	17,505	...	17,505	...	...	17,505
{ Marak ...	59,437	...	59,437	...	...	59,437
{ Sarifas ...	18,806	...	18,806	...	...	18,806
	1,22,627	...	1,22,627	...	...	1,22,627
Fuleli Canals District ... Fuleli ...	2,44,549	...	2,44,549	...	...	2,44,549
	6,24,551	...	6,24,551	...	...	6,24,551
Total Agricultural ...	6,30,114	...	6,30,114	744	228	6,31,086
Begari Canals District ...	5,52,604	33,613	5,18,991	58,697	6,529	5,84,217
Shikarpur Canals District ...	4,96,979	...	4,96,979	5,336	2,475	5,07,890
Ghar Canals District ...	11,02,130	2,20,318	9,41,812	12,155	2,808	9,56,775
Western Nara Canals District ...	7,46,123	...	7,46,123	21,517	2,884	7,70,524
Eastern Nara Canals District ...	4,66,913	3,444	4,63,469	20,251	87	4,83,807
Hyderabad Canals District ...	9,39,947	1,22,627	8,17,320	21,252	4,886	8,43,460
Fuleli Canals District ...	8,51,037	2,44,549	6,06,488	25,207	2,037	6,33,732
Karachi Canals District ...	3,19,953	...	3,19,953	9,080	1,176	3,30,209
	55,34,786	6,24,551	49,10,235	1,77,495	22,884	51,10,614
Add—Agricultural receipts ...	...	...	...	11	...	11
Total ...	55,34,786	6,24,551	49,10,235	1,77,506	22,884	51,10,625

Note.—The figures in this table are actuals.

The total figures in column 5 are exclusive of refunds of revenue of Rs. 2,830.

This table has been prepared on the old principle; but the figures are those supplied by the Examiner, Public Works Accounts, and, appear to include the sum of Rs. 51,213 noticed in Statement C, in body of report.

H. M. THOMPSON, M.Inst.C.E.,

Superintending Engineer,

Indus Left Bank Division,

TABLE VI-A.

Actual Direct and Indirect Receipts of Canal Revenue in 1892-93, as shown in General Revenue Accounts of Executive Districts prepared by Examiner, Public Works Accounts.

Canals and Executive Districts.	Water-share of net consolidated Revenue collected.	Direct Receipts Hakāba and Miscellaneous.	Receipts from Sales of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5
MAJOR WORKS.				
	Rs.	Rs.	Rs.	Rs.
PRODUCTIVE WORKS.				
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.				
<i>Canals in Operation.</i>				
Begari Canals District ...	Desert Canal ... 96,596 Umharwah ... 46,068 Begari ... 3,364.26	28,722 3 29,610	956 1,266 4,079	1,28,274 47,362 3,68,835
	4,79,315	58,335	6,301	5,44,461
Eastern Nara District ...	Nara Supply Channel ... 28,226 Eastern Nara ... 82,140 Mithras Canal ... 2,409.44 Dimwah ... 13,292 Heraawah ... 5,683 Khipra Canal ... 10,999 Thar Canal ... 89,800	9,600 7,015 1,511 60 51 1,964	9 16 50 12	37,635 89,171 2,51,637 13,294 5,683 11,050 91,793
	4,68,025	20,261	87	4,88,363
Total, Major Works	9,39,840	78,596	6,388	10,24,814
MINOR WORKS—IRRIGATION AND NAVIGATION.				
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.				
<i>Canals in Operation.</i>				
Ghar Canals District ...	Sukkur Canal ... 3,26,376 Ghar Canal ... 6,95,118	2,368 9,750	430 2,378	1,29,474 6,07,246
	7,21,494	12,118	2,808	7,36,420
Hyderabad Canals District ...	Mehrabwah ... -6,336 Alibhro Kachori ... 2,380 Marak ... 56,937 Safrawah ... 23,506	81 508 2,743 1,718	364 207 660 479	-5,991 3,069 60,340 25,703
	76,484	5,044	1,610	83,141
Fuleli Canals District ...	Fuleli ... 3,31,210	24,716	1,962	3,57,889
Total, Minor Works, Capital and Revenue Accounts	11,29,191	41,880	6,370	11,77,341
MINOR WORKS—IRRIGATION AND NAVIGATION.				
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.				
<i>Canals in Operation.</i>				
Shikarpur Canals District ...	Canals in Rohri ... 3,20,491 Banda in Rohri Sind Canal ... 1,75,588	5,544 25 3,476	1,616 669	3,27,861 28 1,79,723
	4,96,079	9,043	2,475	5,07,602
Western Nara District ...	Nara ... 5,72,760 Manchar ... 32,333 Aral ... 27,116 Pritehard Canal ... 25,709 Wahur ... 12,354 Marvi ... 14,657 Phitta ... 24,602 Dadu Canals ... 37,061	18,809 898 197 19 418 829 241	4,591 402 31 187 363 311	593,160 32,333 28,014 26,308 12,404 14,491 26,364 37,613
	7,46,153	21,400	2,884	7,70,467
Hyderabad Canals District ...	Nasrat ... 60,125 Nawakhy ... 1,40,761 Dambo ... 24,993 Dadwah ... 67,598 Renwah ... 38,326 Gharo Mahamda ... 1,37,444 Kari Mahamda ... 58,426 Nasirwah ... 57,056 Other Canals ... 68,713	711 3,235 507 2,127 838 6,400 2,767 938 706	427 393 186 603 178 376 553 384 284	61,857 1,40,287 26,626 64,325 39,541 1,44,280 61,726 66,378 68,732
	6,18,206	16,208	3,278	6,37,692
Fuleli Canals District ...	Other Canals ... 30,729 Hajipur Bund	489	85	31,303
	30,729	489	85	31,303

TABLE VI-A.—continued.

Canals and Executive Districts.	Water-share of net consolidated Revenue collected.	Direct Receipts, Hakdab and Miscellaneous.	Receipts from Salra of Occupancy Rights.	Total Direct and Indirect Receipts.
1	2	3	4	5
MINOR WORKS—IRRIGATION AND NAVIGATION.				
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.				
<i>Canals in Operation—continued.</i>				
	Rs.	Rs.	Rs.	Rs.
Karschi Canals District ...	16,710	567	146	17,423
Canals north of Kotri ...	20,264	160	26	21,050
Kalri ...	44,436	1,791	42	46,269
Haghar ...	15,362	336	73	15,771
Uchita ...	8,136	3,013	11	9,160
Canals in Patta, &c. ...	1,968	22	2	1,999
Shal Canals ...	1,19,981	3,080	611	1,23,672
Pingri ...	26,351	43	166	26,560
Canals in Mirpur Batoro ...	10,417	143	73	10,633
Canals in Sujawal ...	13,536	9	40	13,585
Satta ...	5,935	11	8	5,954
Canals in Jati ...	11,121	63	16	11,200
Khanata ...	21,962	774	54	22,790
Nokawari ...	3,773	117	8	3,898
Canals in Shakhbandar ...	.....	138	.....	138
Bunds, left bank ...	.....	263	.....	263
Bunds, right bank ...	.....	.....	.....	.....
Total Minor Works, Revenue Accounts only ...	22,11,030	9,080	1,176	22,77,273
AGRICULTURAL WORKS.				
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.				
<i>In Operation.</i>				
Begari Canals District ...	5,563	362	228	6,153
Shikarpur Canals District ...	.....	5	.....	5
..... { Kisimpur Bund ...	.....	283	.....	283
..... { Sukkur Begari Bund ...	.....	288	.....	288
Ghar Canals District ...	.....	37	.....	37
Western Nara District ...	.....	57	.....	57
Total, Agricultural Works ...	5,563	744	228	6,535
Average revenue before improvements, vide Bombay Government Resolutions Nos. 339 and 306, dated 28th February and 13th April 1893—				
Begari Canal ...	33,613	.....	.....	33,613
Eastern Nara ...	3,444	.....	.....	3,444
Sukkur Canal ...	84,806	.....	.....	84,806
Ghar Canal ...	1,35,612	.....	.....	1,35,612
.....	2,20,318	.....	.....	2,20,318
Mehrabwah ...	26,879	.....	.....	26,879
Alibhar Kacheri ...	37,508	.....	.....	37,508
Marak ...	59,437	.....	.....	59,437
Sarfaraz ...	18,806	.....	.....	18,806
.....	1,22,627	.....	.....	1,22,627
Fuleli ...	2,44,549	.....	.....	2,44,549
.....	6,24,551	.....	.....	6,24,551
Total, Agricultural ...	6,30,114	744	228	6,31,086
.....	.....	11	.....	11
.....	.....	755	.....	6,31,097
Begari Canals District ...	2,18,591	58,697	6,529	5,84,217
Shikarpur Canals District ...	4,96,079	9,336	2,475	5,07,890
Ghar Canals District ...	9,41,812	12,155	2,808	9,56,775
Western Nara Canals District ...	7,46,123	21,517	2,884	7,70,524
Eastern Nara Canals District ...	4,63,469	20,251	87	4,83,807
Hyderabad Canals District ...	8,17,320	21,252	4,885	8,43,460
Fuleli Canals District ...	6,06,485	25,207	2,037	6,33,729
Karschi Canals District ...	3,19,953	9,080	1,176	3,30,209
Total ...	49,10,235	1,77,495	22,884	51,10,614
Add—Agricultural Receipts. ...	.....	11	.....	11
.....	49,10,235	1,77,506	22,884	51,10,625

Note.—The figures in this Table are actuals.
This Table (VI-A) has been prepared on a different principle to accord with adjustment in regards old revenue, but giving same result as similar Table VI-A preceding this. The figures are those supplied by the Examiner and appear to include the sum of Rs. 31,215 noted in Statement C in body of report.

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Indus Left Bank Division.

TABLE VII.

Area of Cultivation and Revenue for 1892-93.

Canals and Executive District.	CULTIVATION.			CONSOLIDATED REVENUE.			REMISSIONS.			Net Consolidated Revenue.	Irrigation share 90 per cent.	Land share 10 per cent.
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13
MAJOR WORKS.												
PRODUCTIVE WORKS.												
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.												
<i>Canals in Operation.</i>												
Begari Canals District. ...	50,393	7,968	58,361	1,02,159	15,940	1,18,099	7,115	940	8,055	1,10,004	90,004	11,000
Unharwah ...	19,761	3,616	23,377	40,245	7,696	48,941	1,090	396	1,486	46,675	42,008	4,667
Begari ...	124,541	35,309	159,850	2,73,663	88,844	3,62,507	1,044	10,761	11,805	3,50,672	3,15,065	35,607
	194,665	46,793	241,458	4,16,067	1,12,688	5,28,747	9,239	12,157	21,396	5,07,351	4,56,611	50,734
Nara Supply Channel. ...	791	10,475	11,266	2,470	30,198	32,668	6	90	104	22,559	20,303	2,256
Eastern Nara District. ...	23,591	22,420	46,017	86,485	39,105	1,25,590	1,282	...	1,287	74,235	66,830	7,405
Mithra Canal ...	99,590	21,304	120,894	2,31,329	46,909	2,78,238	445	...	445	2,77,813	2,50,081	27,732
Dimwah ...	5,535	741	6,276	12,054	1,768	14,743	...	...	...	14,743	13,269	1,474
Heranah ...	2,656	61	2,717	6,008	1,104	7,112	...	...	...	6,104	5,494	610
Khipra Canal ...	6,219	973	7,192	10,550	1,490	12,040	...	...	...	12,040	10,836	1,204
Thar Canal ...	42,179	1,069	43,248	97,439	2,105	99,544	...	...	...	98,564	89,007	9,557
	181,459	67,069	248,528	3,97,167	1,21,747	5,18,914	1,740	96	1,836	5,17,078	4,65,370	51,708
Total, Major Works ...	376,124	103,862	479,986	8,13,234	2,34,437	10,47,671	10,979	12,253	23,232	10,24,929	9,21,967	1,02,962
MINOR WORKS—IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.												
<i>Canals in Operation.</i>												
Ghar Canals ...	56,748	30,187	86,935	1,46,039	92,088	2,40,123	...	866	866	2,39,257	2,15,331	23,926
Ghar Canal ...	181,512	63,522	245,034	6,17,871	1,88,928	8,16,899	4,844	42	4,886	8,12,013	7,30,511	81,502
	237,260	93,709	331,569	7,66,010	2,91,012	10,57,022	4,844	908	5,752	10,51,270	9,46,142	1,05,128
Hyderabad Canals ...	9,581	1,528	11,059	10,572	3,279	22,851	...	24	24	22,827	20,544	2,283
Mehrabwah ...	8,813	688	9,501	20,374	1,760	22,134	...	16	16	22,118	19,906	2,212
Alphar Kacheri ...	47,408	4,036	51,502	1,16,901	11,629	1,28,530	...	...	...	1,29,389	1,16,597	12,792
Mirak ...	28,451	1,849	30,300	41,273	5,993	47,066	...	...	...	47,068	42,381	4,687
Sarfar ...	89,261	8,109	97,370	1,99,620	21,703	2,21,323	16	24	40	2,21,343	1,99,208	22,135
Fuleli Canals ...	238,278	41,268	279,546	5,57,173	89,386	6,46,559	7,020	...	7,020	6,39,539	5,76,686	62,853
	500,399	143,075	703,474	15,22,803	4,02,161	19,24,964	11,880	932	12,812	19,12,152	17,20,836	1,91,316
MINOR WORKS—IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.												
<i>Canals in Operation.</i>												
Shikarpur Canals ...	62,413	62,151	124,564	1,90,484	2,00,201	3,90,685	236	73	309	3,90,376	3,42,339	38,037
Canals in Rohri ...	50,438	12,947	63,385	1,02,255	41,816	2,04,050	...	6	6	2,03,863	1,83,641	20,222
Sind Canal ...	112,851	75,098	187,949	3,42,719	2,42,017	5,84,736	236	79	315	5,84,421	5,25,980	58,441
Nara ...	136,594	88,925	225,519	4,28,583	2,35,545	7,14,128	70,580	8,636	79,216	6,84,912	5,71,421	1,13,491
Manchar ...	304	16,955	17,259	782	87,694	87,876	...	1,186	1,186	36,690	33,021	3,669
Acad ...	1,573	8,243	9,816	3,757	27,199	30,956	...	720	720	30,236	27,512	2,724
Pritchard Canal ...	3,651	6,569	10,219	9,819	22,778	32,597	3,695	...	3,695	28,902	26,013	2,889
Wahur ...	3,444	1,705	5,149	8,082	6,909	14,991	789	174	963	13,778	12,355	1,423
Marvi ...	2,210	2,713	4,923	5,880	30,185	36,065	298	...	298	15,767	14,190	1,577
Phita ...	6,541	5,544	12,085	14,954	12,847	27,801	341	139	480	27,321	24,589	2,732
New Feeder to Western Nara ...	889	833	1,722	1,743	2,573	4,316	168	1	169	4,147	3,732	4,415
Dadu Canals ...	9,126	7,919	17,045	21,067	20,254	41,321	18	6	24	41,197	37,077	4,120
	164,158	137,789	300,947	4,95,267	4,34,735	9,10,002	75,860	10,862	86,722	8,32,909	7,49,010	83,899
Nasrat ...	20,817	5,289	26,055	54,869	13,211	68,080	517	35	582	67,498	60,748	6,750
Nasirki ...	33,042	7,332	40,374	1,00,534	16,858	1,17,392	406	...	406	1,23,089	1,10,780	12,309
Dambro ...	9,226	2,618	11,844	22,096	5,908	28,004	297	...	297	27,705	24,935	2,770
Dudwah ...	26,312	4,332	30,644	59,362	11,505	70,867	2,313	95	3,308	68,499	61,949	6,550
Renwah ...	15,570	4,551	20,121	31,794	11,231	43,025	211	...	211	42,814	38,533	4,281
Chitro Khumda ...	50,977	5,475	56,452	1,38,010	14,330	1,52,340	...	...	...	1,52,340	1,37,646	15,694
Kari Khumda ...	26,180	1,620	27,800	30,810	5,185	35,995	...	...	...	35,995	32,806	3,189
Nasirwah ...	25,195	2,022	27,217	57,291	6,215	63,506	...	...	...	63,506	57,074	6,432
Other Canals ...	22,773	9,340	32,113	63,034	24,545	87,579	1,036	104	1,140	74,439	68,795	7,644
	214,600	42,667	257,267	5,83,440	1,08,866	6,92,306	4,797	234	5,031	6,87,335	6,18,656	68,679
Fuleli Canals District ...	15,373	3,205	18,578	40,857	9,702	50,559	12,617	...	12,617	38,042	34,238	3,804
Other Canals ...	15,373	3,205	18,578	40,857	9,702	50,559	12,617	...	12,617	38,042	34,238	3,804

TABLE VII.—continued.

Canals and Executive District.	CULTIVATION.			CONSOLIDATED REVENUE.			REMISSIONS.			Net Consolidated Revenue.	Irrigation share 50 per cent.	Land share 10 per cent.
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.			
1	2	3	4	5	6	7	8	9	10.	11	12	13
MINOR WORKS—IRRIGATION AND NAVIGATION.												
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT—continued.												
<i>Canals in Operation—continued.</i>												
Canals north of Kotri.	5,700	2,227	8,026	14,534	5,472	20,529	2,012	51	2,063	18,452	26,697	1,165
Kabli ...	10,230	1,264	11,594	24,878	1,924	26,745	3,656	2	5,684	23,057	26,751	2,564
Bagh ...	19,760	1,438	21,198	47,884	11,507	59,391	6,785	...	6,745	51,776	49,553	5,273
Uchita ...	7,009	1,530	8,539	17,176	2,702	20,150	3,100	...	3,570	16,470	15,003	1,667
Canals in Tatta, &c.	4,786	2,022	6,808	12,553	3,816	40,369	6,370	...	5,370	20,599	9,679	1,100
Shal Canals ...	2,652	589	3,240	4,220	2,864	7,106	1,843	...	1,803	2,223	2,001	222
Playah ...	61,378	6,651	71,999	1,50,570	15,330	1,65,900	47,942	54	57,993	1,56,911	1,25,470	13,691
Canals in Mirpur B.	11,644	2,001	13,645	22,590	4,731	35,721	1,818	...	1,818	33,383	31,713	3,550
Canals in Sujawal	6,235	2,913	9,148	10,668	6,294	25,112	11,656	...	41,715	17,497	16,795	1,144
Satta ...	8,147	4,154	12,301	19,435	2,113	20,548	5,791	57	6,781	14,152	12,381	1,476
Canals in Jati ...	1,077	2,008	3,085	5,212	4,269	8,611	1,991	65	2,071	6,540	2,846	604
Kharla ...	5,580	207	5,787	11,674	515	12,246	85	...	85	12,157	10,941	3,215
Kokrawi ...	9,813	307	10,740	22,328	1,500	27,014	2,750	...	2,780	24,233	21,812	2,421
Canals in Shikharband.	1,001	229	1,230	4,931	398	4,433	233	...	233	4,194	3,775	819
Bunds, left bank	...	...	...	...	...	...	...	...	...	...	...	...
Bunds, right bank	...	...	...	...	...	...	...	...	...	...	...	...
Total, Minor Works Revenue Accounts only	158,015	27,007	185,022	4,15,708	62,013	4,77,721	1,09,715	231	1,00,960	3,67,763	3,10,937	36,774
AGRICULTURAL WORKS.												
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.												
<i>In Operation.</i>												
Begri Canals ... Kashmir Bund	629	2,263	3,091	1,061	7,890	6,292	36	24	62	6,230	5,606	624
Shikharband Canals ... Kashmir Bund	...	...	...	...	...	...	...	...	...	...	...	...
Shikharband Canals ... Sukkur Begun Bund	...	...	...	...	...	...	...	...	...	...	...	...
Chis Canals District ... Chis Bunds	...	...	...	...	...	...	...	...	...	...	...	...
Western Nara ... Nara Bunds	...	...	...	...	...	...	...	...	...	...	...	...
Total, Agricultural Works	629	2,263	3,091	1,062	7,890	6,292	36	24	62	6,230	5,606	624
Begin Canals District	306,494	49,033	355,527	4,17,729	1,17,219	5,35,009	9,277	12,181	21,458	5,15,351	4,62,722	51,316
Shikharband Canals District	119,951	75,099	195,050	3,92,219	2,42,017	6,34,236	220	29	315	5,94,221	5,25,960	45,411
Chis Canals District	217,800	25,700	243,500	7,06,019	2,91,022	10,57,042	4,544	909	5,302	10,51,739	9,46,126	1,05,128
Western Nara District	161,188	125,739	306,927	4,80,267	4,21,375	9,01,642	75,860	10,862	16,742	8,21,900	7,40,610	83,290
Eastern Nara District	181,769	15,000	196,769	3,92,307	1,21,742	5,14,049	1,760	96	7,336	5,12,278	4,65,701	58,793
Hyderabad Canals District	335,764	60,767	396,531	7,83,000	1,39,149	9,22,149	6,342	258	8,971	8,68,128	8,17,864	90,514
Fuleli Canals District	243,833	44,471	288,304	6,93,120	99,068	6,92,188	19,437	...	19,637	6,77,281	6,00,624	67,727
Karachi Canals District	335,000	27,037	362,037	4,55,709	67,013	4,77,722	1,09,715	224	1,09,939	5,67,763	5,20,967	56,776
Total	1,633,011	534,089	2,167,100	42,15,701	14,89,381	57,04,892	2,36,302	24,688	2,50,770	44,53,332	40,08,000	4,45,312

Note.—The figures in this table are assessments and do not include the sum of Rs. 51,213 noticed in Statement C in body of report.

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TABLE VII-A.

Comparative Statement showing Increases or Decreases under heads Kharif and Rabi and Irrigation share of net consolidated Assessment for 1891-92 and 1892-93.

Canals and Executive Districts.		1891-92.			1892-93.			Results.		
		Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.
		Kharif.	Rabi.		Kharif.	Rabi.		Kharif.	Rabi.	
		2	3		5	6		8	9	
1		Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
MAJOR WORKS.										
PRODUCTIVE WORKS.										
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE										
<i>Canals in Operation.</i>										
Begari Canals District ..	(Desert Canal)	25,339	6,432	17,393	50,983	7,968	99,004	+25,624	+1,530	+31,901
	(Taharwah)	13,997	5,280	15,578	19,761	3,516	45,068	+5,764	-1,770	+26,430
	(Begari)	108,929	37,497	2,72,799	124,541	35,309	3,15,905	+15,612	-2,188	+42,908
		148,265	49,221	3,05,580	194,665	46,763	4,56,617	+46,400	-2,428	+1,51,037
Eastern Nara District ..	(Nara Supply Channel)	94	3,817	8,723	791	10,475	29,398	+4,097	+7,158	+28,599
	(Eastern Nara)	12,322	17,520	51,091	23,201	32,426	66,830	+11,289	+4,906	+14,829
	(Mithrao Canal)	86,233	30,777	2,37,034	99,590	21,304	2,30,931	+11,307	-0,473	-7,013
	(Dimwah)	6,908	551	13,429	5,833	741	13,269	-1,076	+190	-160
	(Herauwah)	5,308	947	6,321	2,539	61	5,494	+359	-298	-81
	(Khripa Canal)	5,221	2,453	13,563	6,219	973	10,536	+493	-1,485	-3,727
	(Thar Canal)	27,703	7,148	82,690	42,779	1,989	89,907	+15,076	-6,059	+6,977
		142,837	62,118	4,33,745	181,459	57,069	4,65,370	+38,922	-5,948	+31,625
Total, Major Works ..		201,102	111,339	7,39,835	376,124	103,862	9,21,867	+85,022	-7,477	+1,82,663
MINOR WORKS—IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.										
<i>Canals in Operation.</i>										
Ghar Canals ..	(Sukkur Canal)	53,087	34,016	2,17,505	58,248	30,187	2,15,331	+2,261	-3,829	-2,294
	(Ghar Canal)	175,210	57,067	7,09,245	181,512	63,522	7,39,811	+6,302	+6,955	+21,566
		228,297	91,083	9,26,810	239,760	93,709	9,56,142	+9,563	+2,636	+19,332
Hydrabad Canals ..	(Mehrabwah)	11,712	1,456	21,579	9,531	1,538	20,344	-2,161	+73	-4,055
	(Alfihar Kachori)	9,100	90	18,545	8,913	68	19,906	-347	+598	+1,381
	(Sark)	46,329	725	1,02,172	47,966	4,090	1,16,397	+1,137	+3,301	+14,225
	(Sarfrida)	20,979	1,162	39,009	23,451	1,848	42,361	+2,472	+086	+4,332
		88,180	3,443	1,83,303	89,261	8,100	1,99,208	+1,081	+4,857	+15,993
Fuleli Canals District ..	Fuleli	227,701	42,225	5,75,096	233,278	41,266	5,75,596	+5,577	-969	+499
Total, Minor Works, Capital and Revenue Accounts ..		544,178	136,751	16,85,211	560,399	148,075	17,20,936	+16,221	+6,324	+35,725
MINOR WORKS—IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.										
<i>Canals in Operation.</i>										
Shikarpur Canals ..	(Canals in Rohri)	35,859	36,179	2,02,258	62,413	62,151	3,42,339	+26,554	+25,972	+1,40,061
	(Bunds in Rohri)	48,009	15,477	1,83,081	50,438	12,947	1,83,641	+2,429	-2,530	+560
	(Sind Canal)									
		83,868	51,646	3,85,339	112,851	75,098	5,25,980	+28,983	+23,442	+1,40,621
Western Nara District ..	(Nara)	135,461	52,364	5,33,967	126,594	88,965	5,71,421	+1,133	+33,091	+37,454
	(Manohar)	648	8,529	20,400	394	16,955	33,021	-344	+8,616	+12,615
	(Aral)	1,979	6,206	23,577	1,573	5,345	27,212	-399	+2,137	+4,635
	(Pirchind Canal)	3,604	4,469	21,707	3,651	6,568	26,013	+47	+2,090	+4,246
	(New Feeder Western Nara)				269	853	3,732	+589	+853	+3,732
	(Wairur)	4,432	1,392	15,307	3,444	1,708	12,355	-018	-277	-2,952
	(Marvi)	2,253	1,935	11,705	2,510	2,723	14,180	-353	+1,113	+4,895
	(Phitta)	6,625	2,709	18,744	6,641	24,589	+1,016	+635	+5,845	
	(Dadu Canals)	8,580	8,021	22,163	9,152	7,013	37,077	+572	+3,992	+14,924
		162,875	83,728	6,04,716	164,158	136,759	7,49,610	+1,223	+53,061	+82,994

TABLE VII.—continued.

Canals and Executive Districts.			1891-92.			1892-93.			Results.		
			Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.	Cultivation.		Irrigation share of net consolidated Assessment.
			Kharif.	Rabi.		Kharif.	Rabi.		Kharif.	Rabi.	
1	2	3	4	5	6	7	8	9	10		
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.		
Nasrat	20,323	4,262	55,558	20,817	5,238	60,748	+489	+976	+2,190		
Nalakhli	44,066	5,376	1,10,240	43,942	7,332	1,10,750	-964	+1,956	+340		
Dandro	9,360	1,058	24,063	9,225	2,045	24,035	-132	+690	+573		
Dadwah	33,416	9,370	58,155	28,215	4,432	61,649	+2,797	+62	+3,464		
Renswāh	16,689	357	31,997	15,570	4,651	35,538	-1,119	+4,194	+6,636		
Ghāro Mahmuda	52,012	5,013	1,19,420	55,977	6,475	1,37,646	+3,965	+1,562	+15,226		
Kari Shumali	25,803	1,328	61,934	26,189	1,099	68,499	-2,623	+391	-3,328		
Nasirwah	25,043	1,292	64,543	25,195	2,023	67,072	+155	+790	+2,231		
Other Canals	22,072	6,391	61,562	22,273	9,340	68,795	+200	+2,949	+6,933		
	241,732	29,187	5,80,993	244,500	42,667	6,18,856	+2,708	+13,480	+37,064		
Fuleli Canals	15,503	1,412	49,767	15,575	3,205	34,238	-2,023	+1,793	-15,529		
Other Canals	..	..	..	..	..	..	..	..	..		
Hajipur Bund	..	..	..	..	..	..	..	..	..		
	15,503	1,412	49,767	15,575	3,205	34,238	-2,928	+1,793	-15,529		
Canals, North of Kotri	4,793	2,758	17,685	5,799	2,327	16,607	+927	-431	-1,079		
Kalri	11,212	1,561	27,498	10,329	1,364	29,751	-592	-297	-6,747		
Isachar	18,384	6,492	53,311	19,760	4,459	46,553	+1,436	-2,693	-6,755		
Uchita	10,628	835	21,921	7,409	1,530	15,093	-5,619	+675	-6,018		
Canals in Tatta, &c.	7,935	1,670	17,547	4,756	1,092	9,899	-2,309	+122	-7,449		
Shal Canals	2,387	532	7,447	2,032	588	2,991	-35	+69	-3,440		
Punyāri	64,109	2,114	1,57,325	64,378	6,631	1,22,410	+269	+4,537	-34,915		
Canals in Mirpur Bastore	18,471	1,137	35,750	11,744	2,091	31,773	-1,827	+567	-4,907		
Canals in Sujawal	6,124	1,978	13,998	6,355	2,943	10,295	+1,111	-1,865	-3,493		
Satta	9,406	179	19,777	8,147	1,154	13,881	-1,259	+675	-6,496		
Canals in Jati	1,926	150	4,952	1,671	2,068	5,888	-255	+1,948	+604		
Rhania	5,240	67	13,029	4,639	201	10,841	-520	+154	-2,938		
Kokawari	13,762	759	32,397	9,873	907	21,812	-3,889	+148	-10,495		
Canals in Shābandar	1,953	51	4,719	1,601	229	3,775	-382	+178	-944		
Bunds, Left Bank	..	..	..	..	..	..	..	..	..		
Bunds, Right Bank	..	..	..	..	..	..	..	..	..		
Total Minor Works, Revenue Accounts only	170,459	19,210	4,26,826	158,605	27,957	3,80,987	-11,864	+8,747	-95,839		
	677,437	185,193	21,09,640	686,689	255,716	22,59,471	+18,252	+100,523	+1,49,831		
AGRICULTURAL WORKS.											
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.											
In operation.											
Bezāri Canals District	816	2,901	6,103	829	2,265	5,604	+13	-630	-497		
Shikārpur Canals District	..	..	..	..	..	..	..	..	..		
.. .. .	..	..	..	..	..	..	..	..	..		
.. .. .	..	..	..	..	..	..	..	..	..		
.. .. .	..	..	..	..	..	..	..	..	..		
Ghār Canals District	..	..	..	..	..	..	..	..	..		
Western Nāra District	..	..	..	..	..	..	..	..	..		
Total, Agricultural Works	816	2,901	6,103	829	2,265	5,604	+13	-630	-497		
Bezāri Canals District	140,081	52,122	3,11,993	195,494	49,058	4,62,223	+46,413	-3,064	+1,50,540		
Shikārpur Canals do.	58,968	31,656	8,85,339	112,551	75,098	5,25,680	+28,363	+25,442	+1,40,641		
Ghār Canals do.	228,297	91,053	9,36,910	237,860	95,708	9,46,142	+5,563	+5,625	+19,332		
Western Nāra District	162,875	83,728	6,66,716	164,118	136,789	7,49,610	+1,233	+55,051	+82,894		
Eastern Nāra District	142,837	62,118	4,79,743	181,489	57,069	6,55,370	+38,022	-5,049	+51,625		
Hydrabad Canals District	329,918	32,659	7,64,297	339,761	50,767	8,17,584	+2,840	+15,137	+53,567		
Fuleli do. do.	245,204	45,637	6,24,563	243,553	44,471	6,09,534	+2,649	+534	-15,039		
Karachi do. do.	170,459	19,210	4,26,826	158,605	27,957	3,80,987	-11,854	+8,747	-95,839		
Total	1,513,533	436,784	45,40,279	1,633,041	534,918	49,08,000	+119,508	+98,734	+3,67,721		

Note.—The figures in this table are assessments and do not include the sum of Rs. 51,213 noticed in Statement C in body of report.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

Canals and Executive Districts.		Particulars of the Lands, the Occupancy Rights of which were sold.				Amount of Receipts from Sale of Occupancy Rights.	Land share 1/10.	Irrigation share 9/10.	Sums to be credited as indirect Revenue calculated at 4 per cent. on Irrigation share.	REMARKS.
		Taluka.	Village.	Area.	Assessment.					
1	2	3	4	5	6	7	8	9	10	11
MAJOR WORKS.										
PRODUCTIVE WORKS.										
IRRIGATION WORKS NOT CHARGED AGAINST REVENUE.										
<i>Canals in Operation.</i>										
Begari Canals District.	{ Desert Canal			15	...	8	1	7	1	
	{ Doharwah			198	...	98	10	58	3	
	{ Begari			472	...	312	31	291	11	
				683	...	419	42	376	15	
Eastern Nara District.	{ Nara Supply Channel			...	2,401	148	15	133	6	
	{ Eastern Nara			1,482	133	472	47	425	17	
	{ Mithmo Canal			179	...	...	...	...	...	
	{ Dinawah			...	...	...	...	...	...	
	{ Horanawah			...	...	...	...	...	...	
	{ Khripa Canal			...	...	...	...	...	...	
	{ Thar Canal			...	...	...	...	...	...	
				1,652	2,524	620	62	556	23	
Total, Major Works										
				2,385	25,34	1,038	104	991	38	
MINOR WORKS—IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.										
<i>Canals in Operation.</i>										
Ghar Canals	{ Sukkur Canal			123	...	408	40	269	14	
	{ Ghar Canal			1,931	...	10,851	1,008	9,073	863	
				2,124	...	10,489	1,048	9,441	377	
Hyderabad Canals	{ Mehrabwah			25	24	45	4	41	1	
	{ Alibhar Kacheri			221	763	756	74	662	27	
	{ Marak			618	1,687	2,035	206	1,830	74	
	{ Sarfraz			940	1,091	1,425	144	1,281	62	
				1,803	3,565	4,271	425	3,846	164	
Fuloh Canals	{ Fuloh			2,964	8,376	6,480	648	5,832	232	
				6,891	...	21,240	2,121	19,116	764	
Total Minor Works, Capital and Revenue Accounts										
				6,891	...	21,240	2,121	19,116	764	
MINOR WORKS—IRRIGATION AND NAVIGATION.										
WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.										
<i>Canals in Operation.</i>										
Shikarpur Canals	{ Canals in Rohri			614	...	2,046	205	1,841	73	
	{ Bunds in Rohri			714	...	1,848	185	1,663	67	
	{ Sind Canal			1,528	...	3,894	390	3,504	140	
Western Nara District.	{ Nara			4,468	9,264	9,206	921	8,285	231	
	{ Pritchard Canal			760	...	3,365	336	3,029	121	
	{ Wahur			132	...	508	51	457	19	
	{ Mavi			35	87	123	13	110	4	
	{ Phitta			832	2,245	1,717	118	1,599	62	
	{ Dalu Canals			69	203	1,882	188	1,694	68	
				4,720	12,507	10,270	1,627	14,643	586	

TABLE VII-B.—continued.

Canals and Executive Districts.		Particulars of the Lands, the Occupancy Rights of which were sold.				Amount of Receipts from Sale of Occupancy Rights.	Land share 1/10.	Irrigation share 2/10.	Sum to be credited as indirect Revenue calculated at 10 per cent. on Irrigation share.	REMARKS.
1	2	3	4	5	6	7	8	9	10	11
				Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	
Hyderabad Canals	(Nasrat)			635	267	1,765	176	1,582	63	
	(Nasrathi)			157	305	414	41	873	15	
	(Dambro)			199	484	461	46	415	17	
	(Dadwah)			1,767	3,198	3,202	320	2,882	116	
	(Rohaw)			1,468	3,496	1,107	111	296	40	
	(Gharo Mahmuda)			804	1,858	1,852	185	1,667	67	
	(Kari Shumali)			767	1,651	1,195	120	1,075	43	
	(Nasirvahi)			664	1,389	1,462	146	1,316	53	
	(Other Canals)			537	1,343	866	86	750	30	
				7,018	13,950	12,317	1,231	11,086	444	
Fuleli Canals	(Other Canals)			162	376	363	38	344	14	
	(Hajipur Bund)									
				162	376	363	38	344	14	
Karachi Canals	(Canals north of Kotri)			3	7	2		2	0	
	(Kulvi)			412	954	264	26	238	10	
	(Baghar)			2,135	5,123	272	27	245	10	
	(Tolita)			77	166	99		89	4	
	(Canals in Tatta)			201	231	8	1	27	2	
	(Shal Canals)			21	58	30	3			
	(Poyari)			1,354	3,868	4,296	429	3,869	154	
	(Canals in Mirpur Batoro)			767	2,027	1,713	171	1,542	61	
	(Canals in Sujawal)			237	720	61	6	65	3	
	(Satta)			709	1,171	857	87	320	13	
	(Canals in Jati)			75	194	33	3	30	1	
	(Khanra)			212	266	165	17	149	6	
	(Canals in Shahbandar)			714	683	862	86	326	13	
	(Bunds, left bank)			24		12	1	11		
	(Bunds, right bank)									
Total Minor Works, Revenue Accounts only				6,900	14,869	7,672	767	6,905	270	
AGRICULTURAL WORKS.										
WORKS FOR WHICH NO CAPITAL OR REVENUE ACCOUNTS ARE KEPT.										
In operation.										
Begari Canals District, Khashmor Bund										
Shikarpur Canals { Kasimpur Bund										
District ... { Sukkur Begari Bund...										
Ghar Canals District...Ghar bunds										
Western Nara District...Nara bunds										
Total, Agricultural Works										
Begari Canals District				683	no detail	476	42	376	15	
Shikarpur Canals District				1,328		3,894	390	3,504	140	
Ghar Canals				2,124		10,489	1,048	9,441	377	
Western Nara				4,295		16,370	1,637	14,633	586	
Eastern Nara				1,652		2,554	255	2,299	93	
Hyderabad Canals				8,821	17,545	16,538	1,653	14,929	593	
Fuleli Canals				3,126	5,752	6,862	680	6,176	247	
Karachi Canals				6,900	14,869	7,672	767	6,905	270	
Total				28,929		62,813	6,331	60,533	2,362	

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TABLE VIII.
CROP RETURN

FOR

1892-93.

FOR GOVERNMENT LANDS ONLY.

TABLE
CROP

Canals.	Years.	KHA												Class of	
		Rice.				Jowari.				Bajri.				Cot	
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Desert Canal	1888-89	...	198	...	186	3,374	34,508	...	37,882	174	6,966	...	6,240	...	33
	1889-90	...	307	...	301	5,332	52,199	...	57,531	480	6,415	...	6,895	...	40
	1890-91	...	541	...	541	7,821	53,101	...	60,922	786	7,515	...	8,331	...	58
	1891-92	...	254	...	254	2,692	16,320	...	19,012	583	1,676	...	2,259	...	29
1892-93	...	603	...	603	1,760	29,982	...	31,622	476	10,040	...	10,522	...	61	
Unharwah	1888-89	...	158	...	158	3,323	18,887	...	22,010	223	2,956	...	2,851	...	74
	1889-90	...	382	...	382	4,339	18,710	...	23,049	613	2,447	...	3,060	...	138
	1890-91	...	192	...	192	2,147	7,372	...	10,039	973	4,525	...	5,509	...	169
	1891-92	...	673	...	673	1,186	5,988	...	6,874	895	2,755	...	3,630	...	34
1892-93	...	631	...	631	601	6,576	...	7,177	308	7,542	...	7,850	...	165	
Fegari Canal	1888-89	...	6,984	...	6,984	17,640	58,142	...	75,782	847	4,593	...	5,440	...	268
	1889-90	...	10,670	...	10,670	18,546	65,922	...	85,474	1,541	5,510	...	6,771	...	388
	1890-91	...	4,414	...	4,414	16,084	46,333	...	62,522	2,812	5,882	...	12,394	...	245
	1891-92	...	5,391	...	5,391	11,615	49,849	...	55,464	2,748	7,777	...	10,255	...	404
1892-93	...	7,031	...	7,031	14,994	56,621	...	70,615	1,599	16,277	...	17,676	...	69	
Kishmor Bura	1888-89	...	7	...	7	6	800	...	806	...	66	...	66	...	375
	1889-90	...	31	...	31	4	1,350	...	1,530	...	121	...	121	...	612
	1890-91	...	16	...	16	1	330	...	331	2	303	...	307	...	267
	1891-92	...	...	...	...	9	111	...	120	17	29	...	46	...	250
1892-93	...	18	...	18	18	200	...	273	...	176	...	176	...	112	
Canals in Rohri	1888-89	...	8,592	...	8,592	20,345	24,056	...	44,402	1,258	1,537	...	2,815	...	765
	1889-90	...	9,189	...	9,194	18,743	25,454	...	49,197	1,144	4,503	...	5,953	...	860
	1890-91	18	11,391	...	11,409	6,927	20,565	...	27,492	694	1,654	...	2,258	...	719
	1891-92	...	7,090	...	7,090	7,335	16,414	...	23,728	286	893	...	391	...	722
1892-93	2	5,052	...	5,054	16,874	34,311	...	31,685	693	2,735	...	3,428	...	647	
Sind Canal	1888-89	...	20,269	...	20,269	10,576	12,002	...	22,578	114	192	...	396	...	111
	1889-90	2	21,276	...	21,276	11,996	16,825	...	28,823	242	266	...	508	...	148
	1890-91	...	22,235	...	22,235	11,784	11,337	...	23,121	533	391	...	866	...	117
	1891-92	...	22,971	...	22,971	8,716	12,399	...	20,361	357	180	...	537	...	129
1892-93	...	21,935	...	21,935	12,196	12,359	...	34,595	466	510	...	966	...	14	
Sukkur Canal	1888-89	...	24,454	...	24,454	6,679	14,602	...	21,481	112	346	...	438	...	129
	1889-90	...	27,173	...	27,173	7,315	15,923	...	23,238	344	568	...	912	...	324
	1890-91	8	29,612	...	29,620	6,332	12,081	...	18,413	621	1,026	...	1,647	...	156
	1891-92	...	26,894	...	26,894	4,861	10,433	...	15,114	314	302	...	618	...	247
1892-93	...	26,899	...	26,899	7,417	11,639	...	19,106	377	640	...	917	...	20	
Ghar Canals	1888-89	...	60,160	...	60,160	3,767	86,228	...	89,995	255	4,024	...	4,279	...	190
	1889-90	...	97,076	...	97,076	2,899	67,128	...	70,027	227	3,322	...	3,549	...	397
	1890-91	...	120,785	...	120,785	5,540	40,161	...	42,701	847	5,820	...	4,367	...	219
	1891-92	...	122,542	...	122,542	1,222	35,271	...	37,193	236	898	...	1,124	...	384
1892-93	1	123,319	...	123,320	5,566	45,325	...	50,911	182	2,844	...	3,026	...	79	
Banda, Right Bank	1888-89	...	...	...	...	...	...	29	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1891-92	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892-93	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Western Nara	1888-89	...	8	...	75,599	...	75,607	...	24,991	38,467	...	62,558	1,562	1,651	...
	1889-90	...	31	...	67,555	...	25,831	...	63,183	...	29,904	1,911	2,403	...	3,414
	1890-91	...	42	...	71,767	...	71,800	...	20,663	35,232	...	55,965	2,164	1,570	...
	1891-92	...	10	...	60,068	...	63,078	...	24,787	43,890	...	68,217	1,023	1,408	...
1892-93	...	...	...	58,921	...	58,921	...	28,139	45,373	...	71,909	1,759	3,445	...	173
Fritchard Canal	1888-89	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1891-92	...	196	...	196	542	2,737	...	3,279	50	67	...	107	...	13
1892-93	...	323	...	323	891	2,185	...	5,116	61	141	...	202	...	3	
Wahur	1888-89	...	269	...	260	1,654	2,701	...	4,355	210	297	...	617	...	36
	1889-90	...	359	...	359	1,410	3,378	...	4,798	208	365	...	573	...	30
	1890-91	...	8	...	8	1,066	2,494	...	3,560	404	493	...	897	...	5
	1891-92	...	17	...	17	2,325	1,894	...	4,129	29	10	...	23	...	21
1892-93	...	8	...	8	1,914	1,905	...	3,909	148	264	...	413	...	5	
Marvi	1888-89	...	61	...	61	2,274	678	...	2,952	22	26	...	48	...	1
	1889-90	...	105	...	105	2,216	471	...	2,687	130	12	...	142	...	3
	1890-91	...	57	...	57	1,777	583	...	2,360	52	8	...	60	...	1
	1891-92	...	195	...	195	1,684	625	...	2,369	20	7	...	27	...	4
1892-93	...	2	...	2	1,828	483	...	3,061	62	38	...	120	...	1	
Phitta	1888-89	...	234	...	235	3,859	32	...	3,891	91	...	...	91	...	10
	1889-90	...	291	...	291	3,372	381	...	3,849	193	...	...	193	...	1
	1890-91	...	539	...	539	2,677	1,336	...	4,813	191	...	...	191	...	14
	1891-92	...	598	...	598	4,702	45	...	4,840	191	...	...	191	...	1
1892-93	...	538	...	538	5,105	90	...	5,195	729	30	...	810	...	...	

RIF.

Caors.

ton.		Bâbul Plantation.				Other Crops.				Total Khart.			
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.
Acres.		Area in Acres.				Area in Acres.				Area in Acres.			
...	33	...	...	...	...	196	18,047	...	18,243	3,744	58,840	...	62,584
...	55	...	...	...	...	275	12,298	...	12,573	6,057	71,253	...	71,240
...	62	...	...	...	...	103	8,439	...	8,442	9,810	69,284	...	77,594
...	21	...	...	...	...	188	3,444	...	3,752	3,986	21,553	...	25,239
...	...	...	...	...	...	133	7,162	...	7,595	2,369	47,094	...	56,953
...	74	...	...	...	...	621	13,191	...	13,812	4,169	34,166	...	38,335
...	138	...	...	...	...	446	5,195	...	5,611	5,398	26,572	...	32,270
...	111	...	...	...	...	135	1,888	...	2,043	3,379	14,587	...	17,866
...	41	...	...	...	...	123	2,617	...	2,190	2,231	11,267	...	13,995
...	165	...	...	...	...	74	3,864	...	3,835	983	18,778	...	19,791
...	285	...	...	...	...	5,094	53,900	...	59,003	23,598	123,806	...	147,404
...	392	...	...	...	...	2,427	30,436	...	32,863	23,517	112,673	...	136,150
...	247	...	...	...	...	1,311	21,341	...	22,652	20,209	82,430	...	102,629
...	405	...	...	...	...	1,616	35,480	...	37,055	15,981	52,146	...	108,820
...	88	...	5	...	5	1,169	27,828	...	29,696	17,762	106,849	...	124,611
...	378	...	...	...	...	...	57	...	57	6	1,308	...	1,314
...	617	...	...	...	...	...	278	...	298	9	2,583	...	2,597
...	267	...	...	...	...	...	409	...	459	3	1,327	...	1,339
...	256	...	...	...	...	3	392	...	395	35	758	...	817
...	118	...	...	...	...	1	337	...	338	26	803	...	829
...	1,083	...	...	...	...	490	3,707	...	4,227	22,842	38,677	...	61,119
...	847	...	...	...	...	127	3,590	...	3,717	15,506	43,402	...	63,508
...	881	...	...	...	...	63	1,152	...	1,218	7,774	33,484	...	43,258
...	953	...	...	...	...	137	1,657	...	1,181	8,090	27,569	...	35,859
...	891	...	2	...	2	111	1,296	...	1,197	17,944	44,523	...	62,467
...	165	...	...	...	...	984	5,431	...	6,416	11,728	34,105	...	49,838
...	173	...	...	...	...	244	4,433	...	5,387	13,917	43,402	...	56,175
...	158	...	...	...	...	881	2,886	...	3,767	13,241	36,326	...	46,167
...	167	...	...	...	...	807	3,063	...	3,980	11,003	37,006	...	48,009
...	43	...	111	...	111	646	2,644	...	3,290	13,312	37,628	...	59,949
...	168	...	...	...	...	3,251	14,622	...	17,873	10,209	54,183	...	64,422
...	357	...	...	...	...	1,844	10,352	...	12,596	9,538	54,550	...	63,586
...	211	...	...	...	...	1,405	6,444	...	8,249	8,421	46,719	...	55,440
...	302	...	...	...	...	1,645	8,518	...	10,163	6,675	46,414	...	53,490
...	26	...	2	79	81	2,193	7,494	...	9,688	9,990	46,691	...	66,687
...	497	...	...	...	...	829	21,444	...	22,273	4,651	172,262	...	177,513
...	371	...	...	...	...	394	5,648	...	5,408	3,532	175,470	...	177,961
...	288	...	...	...	...	328	3,549	...	2,876	3,443	170,524	...	179,967
...	451	...	...	...	...	312	3,659	...	3,901	2,527	172,884	...	175,211
...	95	...	92	...	92	569	3,678	...	4,228	6,835	175,387	...	181,672
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	20	...	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	458	...	...	...	...	1,042	13,716	...	14,758	30,821	129,673	...	156,294
...	352	...	...	...	...	225	3,151	...	3,676	27,514	136,197	...	166,911
...	365	...	...	...	...	291	2,908	...	2,588	23,254	111,087	...	134,391
...	646	...	...	...	...	701	2,831	...	3,052	26,968	110,449	...	137,433
...	183	...	18	143	161	736	2,541	...	3,074	30,754	108,500	...	139,684
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	16	...	...	...	...	3	3	...	6	596	3,008	...	3,604
...	...	...	1	...	1	...	...	...	3	865	2,786	...	3,651
...	298	...	...	...	...	23	48	...	71	3,158	3,852	...	5,505
...	44	...	...	...	...	5	34	...	39	1,637	4,076	...	5,713
...	31	...	...	...	...	8	12	...	59	1,438	2,943	...	4,426
...	23	...	...	...	...	1	4	...	15	2,416	2,958	...	4,422
...	8	...	1	...	1	6	1	...	7	2,009	1,375	...	3,444
...	1	...	...	...	...	20	24	...	44	2,316	790	...	3,106
...	3	...	...	...	...	59	4	...	54	2,369	592	...	2,961
...	3	...	...	...	...	14	11	...	25	1,745	690	...	2,435
...	6	...	...	...	...	8	12	...	24	1,717	846	...	2,563
...	...	...	3	...	3	5	1	...	6	1,716	477	...	2,192
...	10	...	...	...	...	92	...	...	92	4,053	268	...	4,319
...	1	...	...	...	...	86	...	...	88	3,812	331	...	4,143
...	14	...	...	...	...	20	32	...	52	3,302	1,907	...	5,109
...	1	...	...	...	...	34	3	...	37	5,006	617	...	5,623
...	...	...	...	...	...	51	...	...	51	5,945	658	...	6,603

72

Western Nara	...	236,281
Manchar	...	17,320
Aral	...	10,715
New Feeder, W. N.		1,442
		264,758

Canals.	Years.	KHA												CLASS OF			
														Cot			
		Rice.				Jowari.				Bajri.							
		Lift.	Flow.	Spill except from Govern-ment Canals.	Total.	Lift.	Flow.	Spill except from Govern-ment Canals.	Total.	Lift.	Flow.	Spill except from Govern-ment Canals.	Total.	Lift.	Flow.		
		Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Nara Supply Channel	1888-89	...	3	...	3	845	...	...	845	26	...	...	26	19	...	...	...
	1889-90	...	1	...	1	279	15	...	295	2	69	...	71	25	...	1	...
	1890-91	...	...	...	...	58	18	...	76	2	...	...	...	...	...	5	...
	1891-92	...	1	...	1	48	...	...	48	2	...	...	2	...	1	4	...
	1892-93	...	...	...	...	739	7	...	746	...	3	...	...	8	...	...	...
Eastern Nara	1888-89	...	4,396	...	4,396	3	21	...	24	988	22,905	...	22,903	66	493	...	...
	1889-90	...	5,296	...	5,296	1	7	...	3	304	12,555	...	12,819	70	81	...	...
	1890-91	...	5,795	...	5,795	10	26	...	36	355	5,709	...	6,064	27	281	...	...
	1891-92	...	4,676	...	4,676	6	38	...	44	318	4,114	...	4,463	94	2,926	...	...
	1892-93	...	5,119	...	5,119	85	22	...	107	2,019	14,553	...	16,602	124	626	...	...
Mithrao	1888-89	...	56,620	...	56,699	429	122	...	542	8,339	9,293	...	17,532	4,769	3,914	...	...
	1889-90	...	58,493	...	58,369	286	346	...	592	12,788	7,593	...	20,371	6,399	3,159	...	...
	1890-91	...	49,729	...	49,729	339	93	...	432	13,601	4,883	...	18,244	11,431	4,345	...	...
	1891-92	...	53,182	...	53,182	63	...	...	411	35,526	5,463	...	17,259	9,913	3,221	...	...
	1892-93	...	58,370	...	58,370	483	239	...	724	18,797	6,311	...	25,598	8,216	1,232	...	...
Dinwadi	1888-89	...	...	...	...	91	3	...	94	801	768	...	1,567	648	31	...	...
	1889-90	...	73	...	73	214	105	...	319	2,948	2,018	...	4,956	1,423	1,019	...	...
	1890-91	...	...	...	...	147	106	...	253	2,610	1,314	...	4,124	1,415	339	...	...
	1891-92	...	4	...	4	204	84	...	288	2,662	1,562	...	4,229	1,157	419	...	...
	1892-93	...	...	...	...	223	14	...	237	3,221	769	...	3,971	1,025	81	...	...
Karanwadi	1888-89	...	101	...	101	155	6	...	161	677	319	...	986	490	113	...	...
	1889-90	...	...	...	...	79	...	...	10	853	122	...	975	263	28	...	...
	1890-91	...	116	...	116	93	5	...	98	578	228	...	1,206	504	4	...	...
	1891-92	...	59	...	59	165	22	...	187	1,149	373	...	1,613	660	5	...	...
	1892-93	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khipra	1888-89	...	...	...	...	23	...	...	27	557	3,342	...	3,799	...	...	49	...
	1889-90	...	159	...	159	8	24	...	32	327	3,385	...	3,612	33	804	...	...
	1891-92	...	173	...	173	...	...	...	...	394	3,185	...	3,489	75	1,092	...	...
	1892-93	...	...	...	...	4	5	...	9	975	5,957	...	6,932	23	61	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thar Canal	1888-89	...	21,996	...	21,996	12	2	...	14	501	5,152	...	5,653	66	898	...	...
	1889-90	...	25,227	...	25,227	205	18	...	225	2,011	1,450	...	3,461	1,840	3,496	...	...
	1890-91	...	24,382	...	24,382	6	2	...	8	1,110	553	...	1,663	1,690	2,030	...	...
	1891-92	...	22,316	...	22,316	20	20	...	49	5,199	5,310	...	8,509	563	1,032	...	...
	1892-93	...	25,984	...	25,984	...	...	...	...	...	...	...	...	...	...	...	...
Mehradwadi	1888-89	...	27	...	27	8,637	212	...	8,869	2,284	16	...	2,280	162	1	...	...
	1889-90	...	49	...	49	7,613	496	...	8,094	2,318	51	...	2,809	162	8	...	...
	1890-91	...	71	...	71	6,626	220	...	6,846	2,241	59	...	3,000	147	...	...	...
	1891-92	...	50	...	50	6,736	432	...	7,108	2,549	62	...	2,602	121	...	...	...
	1892-93	...	12	...	12	4,425	290	...	4,711	2,890	67	...	2,987	91	...	...	...
Nasrat	1888-89	...	5	158	...	161	11,239	3,434	...	14,654	775	85	...	860	198	73	...
	1889-90	...	328	...	328	11,215	3,943	...	15,058	1,835	99	...	1,431	177	81	...	...
	1890-91	...	9	393	...	312	10,215	3,867	...	13,792	1,688	179	...	1,896	263	70	...
	1891-92	...	1	293	...	294	10,803	4,041	...	14,574	1,549	147	...	1,803	233	82	...
	1892-93	...	21	138	...	152	10,194	3,722	...	13,916	2,741	358	...	3,069	122	53	...
Naotakhi	1888-89	...	21	357	...	379	22,146	5,813	...	27,969	4,153	975	...	4,428	233	...	64
	1889-90	...	12	348	...	369	23,610	6,625	...	30,225	4,388	338	...	4,736	195	47	...
	1890-91	...	4	452	...	456	19,714	7,431	...	27,145	5,540	628	...	6,418	285	77	...
	1891-92	...	13	401	...	414	21,320	6,758	...	28,038	4,613	518	...	5,159	216	36	...
	1892-93	...	2	142	...	144	18,506	5,850	...	24,356	9,032	1,305	...	10,337	161	27	...
Dandwa	1888-89	...	17	...	17	4,460	401	...	4,861	1,159	74	...	1,194	12	...	8	...
	1889-90	...	14	...	14	6,137	541	...	6,678	1,510	87	...	1,803	29	...	...	...
	1890-91	...	17	...	17	5,555	478	...	6,031	1,393	106	...	1,519	39	...	...	...
	1891-92	...	20	47	...	67	5,923	459	...	6,482	1,966	98	...	1,964	26	1	...
	1892-93	...	3	...	3	4,319	391	...	4,710	3,722	189	...	3,911	24	1	...	...
Dad...	1888-89	...	673	...	673	7,989	976	...	8,965	4,468	28	...	4,697	31	1	...	...
	1889-90	...	425	...	425	5,357	1,158	...	5,995	4,674	324	...	4,969	58	10	...	...
	1890-91	...	1	533	...	534	7,438	1,196	...	8,564	5,110	579	...	6,689	94	10	...
	1891-92	...	692	...	692	8,543	1,290	...	9,944	4,067	538	...	4,625	65	5	...	...
	1892-93	...	9	545	...	554	8,109	1,204	...	9,310	7,552	838	...	8,390	44	3	...
Ren.	1888-89	...	172	...	172	1,703	6	...	1,709	8,860	13	...	8,373	1,392	...	4	...
	1889-90	...	125	...	125	1,923	...	...	1,946	5,953	79	...	6,301	1,161	...	...	...
	1890-91	...	231	...	231	1,532	40	...	1,372	9,545	248	...	8,780	1,380	...	15	...
	1891-92	...	162	...	162	1,981	128	...	2,169	9,770	464	...	9,334	1,440	...	32	...
	1892-93	...	38	...	38	857	165	...	790	11,724	567	...	12,291	314	...	17	...
Aitbar Kachari	1888-89	...	...	...	...	961	...	...	961	3,194	...	...	3,194	1,013	...	...	...
	1889-90	...	...	...	...	1,143	...	...	1,143	5,801	...	...	5,801	1,791	...	...	...
	1890-91	...	...	...	...	701	11	...	712	5,992	62	...	5,454	952	...	10	...
	1891-92	...	...	...	...	727	3	...	732	6,175	19	...	6,184	1,088	...	2	...
	1892-93	...	...	...	...	743	11	...	754	7,236	89	...	7,308	365	...	2	...

RIF.

Crops.

ton.		Bibul Plantation.				Other Crops.				Total Kharif.			
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.
Acres.		Area in Acres.				Area in Acres.				Area in Acres.			
...	19	...	...	...	...	32	1	...	33	922	4	...	926
...	26	...	...	...	...	28	1	...	29	323	56	...	479
...	6	...	...	...	...	23	2	...	25	69	26	...	109
...	9	...	...	...	...	37	1	...	38	89	5	...	94
...	...	...	...	...	...	28	...	...	28	775	16	...	791
...	469	...	...	...	...	45	1,447	...	1,492	402	20,112	...	20,514
...	151	...	...	...	...	15	3,281	...	3,296	359	21,190	...	21,549
...	1,016	...	...	...	...	43	650	...	693	435	13,069	...	13,504
...	2,622	...	...	...	...	29	189	...	218	477	11,845	...	12,322
...	1,082	...	...	...	...	62	589	...	651	2,340	21,251	...	23,591
...	7,733	...	...	...	...	2,792	8,904	...	11,696	16,190	77,853	...	94,043
...	9,988	...	...	...	...	4,234	5,051	...	9,285	23,731	74,898	...	84,179
...	16,309	...	...	...	...	2,355	2,490	...	4,845	20,382	61,708	...	66,553
...	12,134	...	...	...	...	2,624	1,730	...	4,354	26,124	62,159	...	66,583
...	9,449	...	...	...	...	2,309	3,140	...	5,449	27,797	69,793	...	75,242
...	679	...	...	...	...	190	537	...	726	1,739	1,337	...	3,076
...	2,412	...	...	...	...	363	535	...	898	4,948	3,749	...	8,697
...	1,774	...	...	...	...	374	214	...	588	4,746	1,603	...	6,349
...	1,567	...	...	...	...	389	431	...	820	4,417	2,491	...	6,908
...	1,106	...	...	...	...	433	86	...	519	4,462	931	...	5,393
...	693	...	...	...	...	165	921	...	686	1,467	959	...	2,446
...	531	...	...	...	...	125	513	...	613	1,491	769	...	2,262
...	432	...	...	...	...	129	945	...	471	1,459	641	...	2,100
...	544	...	...	...	...	133	209	...	312	1,744	562	...	2,306
...	665	...	...	...	...	119	113	...	232	2,094	672	...	2,726
...	81	...	...	...	...	59	509	...	569	531	3,301	...	3,872
...	839	...	...	...	...	50	431	...	481	313	6,705	...	7,223
...	1,167	...	...	...	...	54	338	...	392	433	4,788	...	5,221
...	87	...	...	...	...	13	78	...	91	1,015	5,204	...	6,219
...	964	...	...	...	...	133	1,711	...	1,894	762	32,759	...	34,651
...	623	...	...	...	...	965	2,490	...	3,455	3,899	32,680	...	36,139
...	5,298	...	...	...	...	733	551	...	1,304	4,769	29,869	...	31,173
...	3,120	...	...	...	...	325	271	...	606	2,331	25,172	...	27,503
...	1,849	...	...	...	...	506	2,391	...	3,897	4,532	28,246	...	32,143
...	103	...	...	...	...	1,095	736	...	1,831	12,698	1,012	...	13,710
...	110	...	...	...	...	1,329	944	...	2,270	11,694	1,513	...	13,208
...	147	...	...	...	...	1,007	643	...	1,650	10,721	963	...	11,714
...	129	...	...	...	...	1,098	665	...	1,763	10,495	1,217	...	11,712
...	35	690	...	...	630	697	305	...	1,692	6,738	798	...	7,531
...	229	...	...	...	...	2,682	1,762	...	4,441	14,868	5,512	...	20,379
...	238	...	...	...	...	1,739	2,727	...	4,446	14,496	6,878	...	21,344
...	273	...	...	...	...	1,305	2,168	...	3,413	15,420	6,146	...	18,566
...	315	...	...	...	...	1,432	2,018	...	3,470	15,747	6,591	...	20,338
...	175	...	...	...	...	1,547	1,928	...	3,473	14,628	6,180	...	20,817
...	392	...	...	...	...	9,509	4,294	...	14,103	36,367	10,893	...	47,170
...	241	...	...	...	...	7,691	4,633	...	12,224	35,897	11,891	...	47,789
...	262	...	...	...	...	5,989	3,236	...	9,225	31,582	12,021	...	43,606
...	292	...	...	...	...	7,801	3,132	...	10,143	33,133	10,553	...	43,686
...	138	...	...	...	...	5,630	2,368	...	8,057	32,345	9,708	...	42,053
...	20	...	...	...	...	749	91	...	840	6,341	590	...	6,932
...	20	...	...	...	...	604	25	...	629	8,277	667	...	8,944
...	40	...	...	...	...	571	112	...	683	8,757	733	...	9,490
...	29	...	...	...	...	769	69	...	838	9,603	754	...	10,357
...	25	...	...	...	...	493	86	...	579	8,561	667	...	9,228
...	32	...	...	...	...	5,852	3,324	...	9,178	18,289	5,963	...	23,543
...	68	...	...	...	...	5,441	3,340	...	8,781	19,016	5,357	...	24,267
...	104	...	...	...	...	5,629	3,381	...	9,010	19,272	5,649	...	24,921
...	70	...	...	...	...	5,347	3,695	...	8,277	17,947	5,471	...	23,418
...	47	...	...	...	...	5,367	2,847	...	8,214	21,078	5,137	...	26,215
...	1,382	...	...	...	...	2,942	9	...	1,051	18,297	200	...	18,497
...	1,297	...	...	...	...	1,771	48	...	1,819	12,739	328	...	13,012
...	1,345	...	...	...	...	2,479	45	...	2,524	15,083	579	...	15,662
...	1,332	...	...	...	...	2,308	154	...	3,152	15,749	340	...	16,089
...	331	...	...	...	...	2,028	92	...	2,130	14,733	817	...	15,550
...	1,018	...	...	...	...	718	...	...	718	5,886	...	...	5,886
...	1,161	...	...	...	...	711	40	...	760	8,816	49	...	8,865
...	462	...	...	...	...	853	9	...	541	7,378	91	...	7,469
...	1,020	...	...	...	...	1,144	2	...	1,146	9,134	26	...	9,160
...	367	...	...	...	...	775	9	...	784	8,709	104	...	8,813

Wheat.				Barley.				Oil-seeds.				Rabul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
873	1,107	...	1,490	...	...	...	...	...	449	...	449	...	...
172	4,713	...	4,845	...	2	...	2	...	1,230	...	1,230	...	...
102	5,046	...	5,148	...	...	...	...	...	578	...	578	...	...
549	2,565	...	3,114	...	...	...	...	...	52	...	52	...	...
74	9,468	...	9,532	...	8	...	8	...	601	...	601	...	...
135	3,273	...	3,308	8	104	...	112	56	2,973	...	3,029	...	...
209	14,283	...	14,517	8	85	...	93	139	44,687	...	44,826	...	...
164	9,632	...	9,721	10	47	...	57	55	15,948	...	16,003	...	...
233	6,577	...	6,810	16	35	...	41	164	6,782	...	6,946	...	...
450	5,302	...	5,752	12	35	...	47	372	10,569	...	10,941	...	...
5,749	9,784	...	15,533	335	202	...	437	1,658	4,913	...	6,571	...	...
5,239	8,945	...	13,892	218	259	...	477	1,669	3,911	...	5,529	...	...
7,133	8,445	...	15,588	100	112	...	222	1,095	2,145	...	3,240	...	...
8,964	15,710	...	24,674	279	160	...	439	1,109	3,337	...	4,439	...	...
7,642	10,497	...	18,109	80	64	...	144	1,276	2,348	...	3,624	...	...
...	4	...	4	...	...	...	...	...	69	...	69	...	...
60	10	...	188	...	...	...	...	352	478	...	478	...	...
178	10	...	452	...	...	...	...	25	330	...	345	...	...
431	21	...	630	...	...	...	...	22	84	...	96	...	...
586	44	...	...	...	...	...	...	26	154	...	210	...	...
...	32	...	92	...	...	...	...	...	13	...	13	...	...
125	...	...	125	...	...	...	...	50	...	...	50	...	...
96	189	...	235	...	...	...	...	1	3	...	4	...	...
165	161	...	326	...	...	...	...	...	17	...	17	...	...
13	6	...	18	...	...	...	...	...	9	...	17	...	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	199	...	199	...	3	...	3	...	1,448	...	1,448	...	...
2	698	...	700	...	9	...	9	5	1,519	...	1,519	...	...
21	853	...	854	...	1	...	1	10	1,430	...	1,460	...	...
14	204	...	218	...	...	...	...	173	563	...	1,036	...	...
232	2,441	...	2,733	18	12	...	90	496	5,515	...	6,011	...	...
765	2,555	...	3,330	9	21	...	30	1,233	6,747	...	8,930	...	...
604	1,227	...	1,991	16	20	...	46	307	453	...	760	...	...
637	1,734	...	2,391	4	34	...	38	529	2,945	...	3,483	...	...
158	30	...	188	6	3	...	9	165	577	...	742	...	...
304	9	...	313	8	...	...	8	82	10	...	92	...	...
1,154	56	...	1,210	14	3	...	17	69	49	...	113	...	...
922	16	...	938	11	1	...	12	238	5	...	263	...	...
1,063	133	...	1,233	11	2	...	13	104	8	...	118	...	...
994	49	...	1,043	9	1	...	10	142	56	...	198	...	7
956	1,002	...	1,958	16	17	...	33	125	36	...	161	...	...
2,399	1,394	...	3,692	59	17	...	47	150	122	...	272	...	...
1,731	1,462	...	3,247	29	7	...	36	236	189	...	375	...	...
2,130	1,597	...	3,717	34	18	...	60	207	86	...	290	...	...
2,732	1,434	...	4,210	19	12	...	31	445	224	...	669	...	32
1,983	1,480	...	3,343	34	24	...	68	192	52	...	244	...	...
2,548	1,734	...	4,280	41	16	...	56	183	172	...	355	...	...
1,918	2,125	...	4,043	50	53	...	103	132	304	...	336	...	...
2,352	2,230	...	4,632	55	23	...	78	235	191	...	486	...	...
2,924	1,944	...	4,968	28	39	...	67	1,054	170	...	1,824	...	114
254	103	...	387	9	6	...	15	29	61	...	90	...	...
380	160	...	540	10	1	...	11	...	...	...	...	...	...
760	814	...	1,074	15	1	...	16	...	159	...	159	...	...
1,152	860	...	1,538	31	2	...	33	...	85	...	85	...	...
940	496	...	1,334	72	7	...	80	839	238	...	1,177	...	16
259	624	...	683	26	20	...	46	78	138	...	218	...	...
237	832	...	1,119	21	51	...	72	251	383	...	634	...	...
441	947	...	1,388	23	77	...	109	288	426	...	714	...	...
705	1,601	...	2,306	49	132	...	173	699	1,046	...	1,655	...	...
498	1,433	...	1,921	56	248	...	304	826	1,779	...	2,605	6	21
75	118	...	194	...	1	...	1	21	38	...	59	...	...
127	222	...	348	...	3	...	6	317	364	...	681	...	...
181	129	...	291	...	1	...	6	238	691	...	929	...	...
5	256	...	261	...	1	...	1	7	26	...	33	...	...
71	520	...	591	...	20	...	20	490	5,889	...	4,319	...	8
1	...	...	1	...	...	...	...	2	...	...	2	...	...
8	...	...	8	...	...	...	...	13	5	...	17	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	180	...	866	...	...	...	...	3	...	...	3	...	...
...	...	...	...	...	...	...	...	91	498	...	498	...	29

CROP RETURN

		KHARIF.															
Canals.	Years.	CLASS OF															
		Rice.				Jowari.				Bajri.				Cot.			
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Total.	
		Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Mirak...	1888-89	...	...	...	...	3,487	59	...	3,546	50,757	324	...	21,081	11,802	401	...	
	1889-90	2	7	...	0	3,850	138	...	3,997	33,339	349	...	23,858	12,946	268	...	
	1890-91	...	43	...	43	2,262	50	...	2,562	23,833	216	...	24,640	10,426	286	...	
	1891-92	...	52	...	52	2,713	110	...	2,894	22,953	125	...	26,673	...	...	...	
	1892-93	...	20	...	20	1,773	174	...	1,948	27,919	4,639	...	32,018	7,507	1,107	...	
Ghāro Mahmūda ...	1888-89	...	150	...	150	2,739	14	...	2,753	27,512	174	...	27,716	12,743	113	...	
	1889-90	112	32	...	154	3,366	53	...	3,418	28,408	419	...	28,357	11,683	255	...	
	1890-91	...	106	...	106	2,711	141	...	2,852	31,709	1,413	...	33,122	13,933	446	...	
	1891-92	...	163	...	163	3,110	144	...	3,254	29,713	1,268	...	30,981	13,661	449	...	
	1892-93	...	338	...	338	2,219	243	...	2,447	35,518	4,135	...	39,653	9,465	728	...	
Kari Shumali ...	1888-89	...	...	...	...	1,862	2	...	1,864	20,134	41	...	20,179	8,492	14	...	
	1889-90	...	...	...	...	1,469	...	...	1,504	20,682	118	...	20,801	9,234	1	...	
	1890-91	...	...	...	...	1,040	9	...	1,049	21,967	46	...	22,045	7,082	10	...	
	1891-92	...	...	...	...	1,215	2	...	1,217	18,951	57	...	19,038	5,954	22	...	
	1892-93	...	...	...	...	1,266	11	...	1,277	20,117	374	...	20,491	2,509	30	...	
Nasir ...	1888-89	...	55	...	55	912	...	...	912	18,164	3	...	18,167	6,170	15	...	
	1889-90	...	...	...	...	1,102	...	...	1,102	18,689	8	...	18,691	6,103	...	...	
	1890-91	...	3	...	3	887	...	...	887	20,969	8	...	20,907	4,867	45	...	
	1891-92	...	3	...	3	1,161	1	...	1,162	16,983	23	...	17,011	4,940	115	...	
	1892-93	...	6	...	6	955	81	...	956	18,573	614	...	19,493	3,985	140	...	
Sarfrazwah ...	1888-89	...	12	...	12	456	7	...	463	13,206	991	...	13,406	3,333	10	...	
	1889-90	...	...	...	...	641	34	...	675	12,970	491	...	14,391	3,338	51	...	
	1890-91	...	...	...	...	563	35	...	598	14,813	452	...	15,265	3,438	98	...	
	1891-92	...	39	...	39	763	51	...	818	14,276	453	...	14,709	3,401	165	...	
	1892-93	...	62	...	62	626	30	...	656	18,310	564	...	18,574	1,891	85	...	
Other Canals ...	1888-89	...	26	...	26	8,351	1,237	...	9,589	8,089	220	...	8,309	199	3	...	
	1889-90	7	38	...	45	9,490	1,404	...	10,894	8,565	204	...	8,771	237	7	...	
	1890-91	1	64	...	65	8,405	1,105	...	9,510	8,370	693	...	9,063	230	21	...	
	1891-92	23	107	...	132	9,789	1,128	...	10,917	8,239	541	...	8,850	155	11	...	
	1892-93	...	13	...	13	7,309	933	...	8,242	10,066	1,137	...	11,043	82	10	...	
Fuleli Canal...	1888-89	10	127,060	...	127,079	2,383	1,537	...	3,920	53,583	5,653	...	58,636	8,011	733	...	
	1889-90	18	122,545	...	122,563	2,632	3,120	...	6,062	60,814	14,922	...	75,106	10,329	1,875	...	
	1890-91	14	136,274	...	136,298	1,024	1,380	...	3,284	64,782	8,706	...	73,482	11,454	1,423	...	
	1891-92	10	127,002	...	127,022	3,308	2,228	...	5,526	69,895	8,509	...	81,691	10,983	1,653	...	
	1892-93	5	123,693	...	123,693	2,963	2,297	...	4,620	69,995	15,092	...	81,691	10,983	1,653	...	
Other Canals ...	1888-89	...	9,149	...	9,149	373	62	...	435	6,075	356	...	6,431	141	23	...	
	1889-90	...	10,418	...	10,418	396	157	...	733	8,947	1,680	...	9,327	226	45	...	
	1890-91	...	8,735	...	8,735	319	56	...	8,735	5,217	291	...	5,448	372	20	...	
	1891-92	...	9,822	...	9,822	544	32	...	576	6,545	367	...	6,912	296	42	...	
	1892-93	3	7,660	...	7,660	308	36	...	344	6,468	491	...	6,910	45	14	...	
Canals North of Kotri	1888-89	1	687	...	688	6,310	1,706	...	8,106	2,877	223	...	3,099	280	15	...	
	1889-90	1	422	...	423	6,492	2,540	...	9,034	3,244	364	...	3,008	290	26	...	
	1890-91	...	509	...	509	1,317	211	...	2,128	1,970	21	...	2,040	219	36	...	
	1891-92	...	875	...	875	1,751	216	...	1,967	1,713	39	...	1,752	23	9	...	
	1892-93	...	991	...	991	2,020	84	...	2,104	2,395	35	...	2,430	36	1	...	
Kutri ...	1888-89	...	5,685	...	5,685	597	...	...	597	2,178	130	...	2,593	...	...	...	
	1889-90	...	5,256	...	5,256	819	...	...	819	2,877	21	...	2,871	...	...	...	
	1890-91	...	5,766	...	5,766	530	3	...	623	3,157	21	...	3,174	1	...	...	
	1891-92	...	6,101	...	6,101	629	19	...	648	3,283	143	...	3,423	...	...	...	
	1892-93	...	4,845	...	4,845	213	6	...	219	4,191	183	...	4,374	...	...	...	
Baghar ...	1888-89	16	7,022	...	7,038	28	...	...	28	5,414	62	...	5,499	...	...	...	
	1889-90	...	7,421	...	7,421	56	...	...	56	4,084	574	...	4,558	...	...	...	
	1890-91	3	10,130	...	10,138	9	1	...	10	5,829	31	...	6,149	...	...	...	
	1891-92	6	10,337	...	10,343	1	10	...	10	6,302	239	...	6,441	...	...	...	
	1892-93	3	9,968	...	9,971	5	5	...	10	7,577	257	...	8,164	...	...	...	
Uchita ...	1888-89	9	9,425	...	9,432	...	...	...	...	27	...	...	27	...	...	...	
	1889-90	22	8,339	...	8,372	...	...	...	...	84	...	...	84	...	...	...	
	1890-91	20	10,246	...	10,268	...	...	...	...	83	...	...	83	...	...	...	
	1891-92	10	9,913	...	9,921	...	...	...	...	131	...	...	131	...	...	...	
	1892-93	13	6,536	...	6,544	...	...	...	...	436	...	...	436	...	...	...	
Canals in Tatta ...	1888-89	2	9,911	...	9,913	11	8	...	10	473	5	...	481	...	...	...	
	1889-90	...	8,164	...	8,165	17	46	...	62	375	155	...	530	...	...	...	
	1890-91	1	8,383	...	8,394	60	...	...	60	563	38	...	601	...	...	...	
	1891-92	2	6,803	...	6,807	...	...	...	...	571	46	...	617	...	...	...	
	1892-93	...	4,483	...	4,483	...	...	...	15	381	...	...	397	...	...	...	
Shal Canals...	1888-89	...	2,427	...	2,427	...	...	...	...	10	87	...	107	...	...	...	
	1889-90	...	2,301	...	2,301	...	...	...	...	10	325	...	335	...	...	...	
	1890-91	...	2,435	...	2,435	...	...	...	3	30	...	...	30	...	...	...	
	1891-92	...	2,317	...	2,317	...	...	...	...	70	...	...	70	...	...	...	
	1892-93	...	1,981	...	1,981	...	...	...	15	18	...	...	54	...	...	...	

ton.	Babul Plantation.				Other Crops.				Total Kharif.			
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.
Acres.	Area in Acres.				Area in Acres.				Area in Acres.			
...	12,03	...	...	...	3,224	172	...	3,386	39,270	9'6	...	40,226
...	13,774	...	...	...	4,119	106	...	4,285	44,485	8'08	...	45,353
...	10,522	...	...	...	3,438	203	...	3,641	39,979	1,434	...	41,417
...	8,074	...	...	...	3,742	461	...	4,206	41,002	6,664	...	47,666
...	12,456	...	...	...	3,506	108	...	3,614	46,130	550	...	46,689
...	14,938	...	...	...	4,378	209	...	3,675	50,042	949	...	50,991
...	14,479	...	...	...	3,208	193	...	3,247	51,601	2,215	...	53,816
...	14,110	...	...	...	3,380	144	...	3,504	50,814	2,186	...	52,912
...	10,183	...	...	...	3,168	178	...	3,346	50,570	5,007	...	55,577
...	8,606	...	...	...	3,136	9	...	3,145	33,628	66	...	33,694
...	9,225	...	...	...	3,467	20	...	3,507	31,892	141	...	32,033
...	7,042	...	...	...	3,314	5	...	2,319	32,233	72	...	32,455
...	5,978	...	...	...	2,558	14	...	2,572	28,770	95	...	28,865
...	2,559	...	...	...	1,827	26	...	1,853	25,719	461	...	26,180
...	6,185	...	...	...	1,751	1	...	1,753	26,998	74	...	27,072
...	6,103	...	...	...	1,595	1	...	1,496	26,889	6	...	26,895
...	4,912	...	...	...	1,563	2	...	1,565	27,408	58	...	27,464
...	5,055	...	...	...	1,900	6	...	1,912	28,355	148	...	28,503
...	3,125	...	...	...	1,355	33	...	1,588	24,374	824	...	25,198
...	3,343	...	...	...	1,018	150	...	1,766	18,911	439	...	19,050
...	3,319	...	...	...	1,373	102	...	1,375	19,152	608	...	19,760
...	3,526	...	...	...	1,081	58	...	1,742	20,498	943	...	21,341
...	3,568	...	...	...	1,300	47	...	1,847	20,192	767	...	20,959
...	2,916	1	5	6	1,008	28	...	1,036	22,678	775	...	23,454
...	202	...	...	...	1,896	176	...	2,042	18,506	1,682	...	20,188
...	244	...	...	...	1,750	217	...	1,967	19,149	1,872	...	22,021
...	261	...	...	...	1,741	395	...	2,136	17,447	2,378	...	21,825
...	106	...	...	...	1,637	451	...	2,084	10,791	2,282	...	22,073
...	92	...	...	...	1,514	469	...	1,893	19,711	2,562	...	22,273
...	8,794	...	...	...	7,781	2,858	...	10,489	70,577	137,941	...	209,718
...	12,494	...	...	...	8,084	2,864	...	10,948	82,677	144,786	...	227,463
...	13,577	...	...	...	8,230	1,923	...	10,118	80,464	149,090	...	239,554
...	13,646	...	...	...	8,763	2,265	...	11,236	84,835	142,848	...	257,101
...	11,766	321	741	1,062	6,095	1,461	...	7,556	88,472	144,806	...	233,278
...	164	...	...	...	663	260	...	923	7,255	9,850	...	17,105
...	281	...	...	...	441	343						

RABI.

Class of

Wheat.				Barley.				Oil-seeds.				Babul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
...	17	...	17	...	...	...	...	52	81	...	116	...	...
...	36	...	36	...	...	...	...	3	192	...	195	...	...
84	2	...	86	...	...	...	...	224	292	...	426	...	...
61	75	...	136	...	...	...	...	43	5,317	...	180	...	...
183	223	...	441	...	...	...	...	601	...	...	3,702	...	290
171	1,7	...	323	...	...	...	...	96	221	...	326	...	...
156	4,5	...	591	1	1	...	2	322	1,719	...	2,041	...	...
157	372	...	529	...	...	...	...	110	666	...	716	...	...
254	744	...	1,018	...	...	...	...	138	617	...	775	...	...
178	1,122	...	1,900	1	...	...	1	138	1,068	...	2,198	29	1,273
97	197	...	294	...	...	...	...	25	44	...	69	...	...
106	218	...	324	...	...	...	...	153	172	...	325	...	...
77	255	...	332	...	...	...	...	72	511	...	583	...	...
407	2,4	...	407	3	...	...	3	97	78	...	168	...	...
541	329	...	875	...	...	...	...	160	196	...	356	...	153
...	78	...	78	...	...	...	...	15	32	...	47	...	...
?	150	...	157	...	...	...	...	154	142	...	299	...	...
10	331	...	241	...	...	...	...	37	478	...	515	...	...
30	296	...	296	...	...	...	...	123	60	...	183	...	...
105	134	...	239	2	...	...	2	232	351	...	583	33	465
...	121	...	121	...	1	...	1	...	112	...	112	...	...
45	323	...	368	...	...	...	...	109	118	...	227	...	...
11	420	...	431	...	4	...	4	69	431	...	550	...	...
14	404	...	418	1	...	...	...	90	160	...	250	...	...
18	837	...	855	...	5	...	...	60	467	...	527	22	204
1,572	602	...	2,174	55	15	...	70	290	75	...	361	...	...
2,455	1,811	...	3,646	45	40	...	85	431	294	...	828	...	...
2,398	1,389	...	3,577	43	27	...	70	407	1,111	...	1,519	...	...
2,805	2,063	...	4,868	71	83	...	154	536	729	...	965	...	...
2,777	3,003	...	5,780	70	125	...	195	1,157	2,396	...	3,553	?	180
551	3,946	...	4,497	86	1,677	...	1,763	702	13,224	...	13,926	...	...
577	7,757	...	8,334	185	2,450	...	3,035	1,358	17,445	...	19,003	...	...
334	8,171	...	8,905	36	2,394	...	2,430	745	17,993	...	18,598	...	...
692	10,624	...	11,316	79	3,125	...	3,325	258	19,659	...	19,922	...	...
301	15,163	...	15,459	22	3,530	...	3,602	406	15,101	...	16,507	218	6,223
40	153	...	193	...	11	...	11	34	125	...	159	...	...
42	1,136	...	1,208	459	1,344	...	1,893	2,107	2,320	...	4,427	...	...
79	732	...	861	6	140	...	146	24	91	...	1,018	...	...
27	1,074	...	1,101	2	7	...	9	...	167	...	167	...	...
46	2,036	...	2,082	4	60	...	61	65	1,702	...	1,767	...	65
554	554	...	953	7	21	...	23	60	239	...	299	...	...
799	1,188	...	1,983	49	50	...	99	55	1,303	...	1,358	...	...
46	856	...	902	1	2	...	3	...	816	...	816	...	...
7	1,679	...	1,686	...	...	...	...	10	753	...	763	...	...
75	1,320	...	1,395	1	...	...	1	339	897	...	1,236	...	39
...	...	...	...	50	234	...	334	...	39	...	20	...	...
...	46	...	46	...	865	...	865	...	54	...	34	...	...
...	8	...	8	...	219	...	219	...	235	...	355	...	...
...	7	...	7	24	865	...	869	...	100	...	100	...	...
...	4	...	4	35	523	...	561	12	628	...	649	...	...
...	3	...	3	...	1,227	...	1,227	...	5	...	5	...	...
...	...	...	...	115	5,180	...	5,301	...	133	...	136	...	...
...	158	...	158	80	2,360	...	2,440	...	659	...	659	...	...
...	...	...	...	53	4,015	...	4,068	...	591	...	591	...	...
...	...	...	...	60	1,511	...	1,671	71	1,868	...	2,009	...	...
...	...	...	...	20	68	...	83	...	11	...	11	...	...
...	...	...	...	11	177	...	188	...	28	...	28	...	...
...	...	...	...	10	85	...	95	...	53	...	53	...	...
...	...	...	...	3	149	...	149	18	24	...	147	...	...
...	...	...	...	25	397	...	412	2	145	...	...	...	...
...	80	...	80	7	214	...	281	4	24	...	28	...	...
...	127	...	127	...	877	...	877	...	107	...	107	...	...
...	248	...	248	...	4,0	...	40	...	454	...	454	...	...
...	271	...	271	5	615	...	629	...	107	...	107	...	...
...	163	...	159	23	831	...	839	...	783	...	783	...	...
...	108	...	108	...	4	...	4	...	29	...	29	...	...
...	254	...	254	...	1	...	1	...	27	...	27	...	...
...	307	...	307	...	2	...	2	...	190	...	190	...	...
...	497	...	497	...	...	...	...	...	18	...	18	...	...
...	451	...	451	...	6	...	6	...	245	...	245	...	...

—continued.

Crops.										Total Cultivation.					REMARKS.
Plantation.		Other Crops.				Total Rabi.									
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.		
Acres.		Area in Acres.				Area in Acres.				Area in Acres.					
...	...	25	360	...	385	77	441	...	518	39,347	1,397	...	40,744		
...	...	4	317	...	321	7	537	...	544	44,482	1,405	...	45,897		
...	...	32	336	...	368	259	540	...	820	40,399	1,979	...	42,347		
...	...	85	331	...	419	189	546	...	735	44,100	2,074	...	47,004		
...	290	12	32	...	44	361	3,616	...	4,477	41,863	10,080	...	51,943		
...	...	183	1,403	...	1,591	458	1,791	...	2,249	46,589	2,349	...	48,938		
...	...	39	1,551	...	1,587	515	3,696	...	4,211	50,557	4,945	...	55,502		
...	...	214	2,201	...	2,415	481	3,173	...	3,650	52,042	5,424	...	57,466		
...	...	125	2,003	...	2,130	547	3,596	...	3,913	50,391	5,584	...	55,925		
...	1,902	224	547	...	791	650	6,540	...	6,190	51,020	11,147	...	62,167		
...	...	105	253	...	359	228	494	...	722	33,856	560	...	34,416		
...	...	168	225	...	393	427	615	...	1,042	35,319	759	...	36,078		
...	...	64	325	...	389	1,091	1,304	...	2,395	32,596	1,163	...	33,719		
...	...	79	474	...	553	576	752	...	1,328	29,284	547	...	30,191		
...	153	100	213	...	313	806	891	...	1,697	26,525	1,352	...	27,877		
...	...	386	287	...	673	401	397	...	798	27,399	471	...	27,870		
...	...	389	469	...	858	552	761	...	1,313	27,441	767	...	28,208		
...	...	241	728	...	1,009	324	1,467	...	1,735	27,734	1,023	...	28,757		
...	...	213	610	...	823	256	876	...	1,132	25,251	1,024	...	26,275		
...	408	153	928	...	1,109	555	1,876	...	2,431	24,929	2,700	...	27,629		
...	...	80	164	...	244	80	400	...	480	18,691	889	...	19,580		
...	...	101	300	...	401	255	741	...	996	19,407	1,549	...	20,756		
...	...	91	373	...	463	171	1,517	...	1,448	20,869	1,529	...	22,538		
...	...	129	360	...	488	233	929	...	1,162	30,435	1,716	...	32,141		
...	230	121	292	...	412	721	1,804	...	2,065	22,697	2,579	...	25,476		
...	...	104	101	...	205	1,040	793	...	2,733	20,446	2,455	...	22,901		
...	...	128	119	...	337	3,083	1,834	...	4,916	23,211	3,690	...	26,937		
...	...	72	310	...	382	2,630	2,717	...	5,347	21,577	4,905	...	26,572		
...	...	56	318	...	374	3,168	3,223	...	6,391	22,959	5,904	...	28,404		
...	187	150	862	...	1,012	4,161	6,068	...	10,727	23,572	9,128	...	33,000		
...	...	1,068	4,585	...	5,673	2,427	23,478	...	25,889	73,264	161,273	...	234,577		
...	...	8,641	8,641	...	9,897	3,370	39,009	...	40,389	86,847	151,952	...	267,732		
...	...	8-8	10,696	...	11,557	2,633	39,037	...	41,690	85,407	189,037	...	277,528		
...	...	887	6,895	...	7,782	1,021	40,304	...	42,225	86,774	183,132	...	269,928		
...	6,941	1,041	4,194	...	5,235	1,986	46,156	...	48,944	90,590	190,802	...	281,232		
...	...	130	322	...	452	204	511	...	815	7,455	10,461	...	17,917		
...	...	468	915	...	1,383	3,406	6,015	...	9,821	12,856	18,338	...	31,194		
...	...	3	192	...	195	112	2,108	...	2,220	6,802	11,747	...	18,549		
...	...	19	116	...	135	48	1,364	...	1,412	7,950	11,866	...	19,915		
...	65	69	205	...	255	176	4,968	...	4,543	7,413	12,405	...	19,518		
...	...	58	115	...	206	559	892	...	1,491	10,503	3,907	...	14,410		
...	...	164	282	...	436	1,038	2,823	...	3,861	11,454	6,316	...	17,770		
...	...	64	421	...	487	111	2,097	...	2,209	4,325	2,968	...	7,293		
...	...	7	902	...	909	24	2,734	...	2,758	3,659	3,551	...	7,340		
...	39	328	185	...	519	741	2,449	...	3,190	2,335	5,504	...	5,599		
...	...	60	498	...	546	110	780	...	900	4,053	6,925	...	10,680		
...	...	447	177	...	624	441	1,132	...	1,699	5,090	6,695	...	11,745		
...	...	207	497	...	704	207	1,059	...	1,266	4,507	7,473	...	11,780		
...	...	38	532	...	565	51	1,504	...	1,561	4,941	7,532	...	12,773		
...	...	117	1,250	...	1,367	167	2,403	...	2,572	5,339	7,540	...	12,579		
...	...	121	655	...	778	121	1,890	...	2,011	8,838	10,029	...	18,867		
...	...	121	1,044	...	1,205	242	6,403	...	6,645	8,063	14,183	...	22,511		
...	...	114	2,061	...	2,175	184	5,238	...	5,432	7,858	15,519	...	23,707		
...	...	47	1,756	...	1,839	190	6,832	...	6,602	7,756	10,070	...	24,526		
...	...	66	3,927	...	3,995	199	7,476	...	7,615	9,630	17,505	...	27,435		
...	...	61	361	...	423	81	435	...	516	394	9,941	...	10,335		
...	...	84	705	...	789	95	910	...	1,005	429	9,491	...	9,489		
...	...	83	949	...	1,032	93	1,087	...	1,140	475	11,541	...	12,016		
...	...	16	588	...	604	97	758	...	855	475	10,303	...	11,033		
...	...	116	2,572	...	2,688	143	3,104	...	3,247	880	10,326	...	11,156		
...	...	52	246	...	298	63	624	...	697	731	10,643	...	11,374		
...	...	21	312	...	333	21	1,423	...	1,444	623	9,307	...	10,480		
...	...	45	407	...	455	46	1,593	...	1,557	717	10,255	...	11,033		
...	...	47	472	...	472	5	1,485	...	1,470	603	7,902	...	8,585		
...	...	11	359	...	670	46	2,625	...	2,671	671	6,760	...	7,457		
...	...	...	332	...	332	...	473	...	473	19	3,911	...	3,921		
...	...	...	15	...	15	...	297	...	301	18	2,947	...	2,955		
...	...	...	75	...	75	...	134	...	134	3,070	...	...	3,143		
...	...	...	24	...	24	...	539	...	539	...	2,923	...	2,926		
...	...	...	128	...	128	...	833	...	833	16	2,861	...	2,865		

CROP RETURN

														KHARIF.	
														CLASS OF	
Canals.	Years.	Rice.				Jowari.				Bajri.				Cot.	
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Playa	1888-89	6	59,497	...	59,503	16	10	...	26	2,434	54	...	2,438	2	2
	1889-90	23	64,325	...	64,332	47	43	...	90	3,155	233	...	3,387	4	16
	1890-91	7	61,553	...	61,562	29	3	...	31	2,483	169	...	2,654	7	...
	1891-92	105	59,464	...	59,469	92	13	...	103	2,857	51	...	2,908	6	...
	1892-93	1	60,245	...	60,246	18	12	...	30	3,094	44	...	3,138	5	...
Canals in Kirpur Batoro...	1888-89	...	9,406	...	9,406	46	4	...	50	2,655	62	...	2,717	7	2
	1889-90	...	10,451	...	10,451	46	25	...	71	3,510	533	...	4,043	4	1
	1890-91	...	10,169	...	10,169	66	5	...	71	2,900	182	...	3,082	7	1
	1891-92	...	9,981	...	9,981	118	23	...	141	3,001	125	...	3,126	6	...
	1892-93	1	7,662	...	7,662	46	10	...	56	2,917	364	...	3,271	8	...
Canals in Sajawal...	1888-89	...	5,622	...	5,622	...	...	...	...	752	25	...	777	...	1
	1889-90	...	10,451	...	10,451	46	25	...	71	3,510	533	...	4,043	4	1
	1890-91	...	6,157	...	6,157	...	...	...	...	631	4	...	635	...	...
	1891-92	...	6,658	...	6,658	...	...	...	...	435	8	...	443	...	...
	1892-93	...	5,177	...	5,177	...	...	...	...	950	53	...	1,003	...	...
Satta	1888-89	...	4,682	...	4,682	16	2	...	17	2,706	1	...	2,707	...	...
	1889-90	...	4,604	...	4,604	48	9	...	50	3,388	...	...	3,388	...	...
	1890-91	...	5,800	...	5,800	...	...	...	15	2,915	5	...	2,919	...	...
	1891-92	37	5,610	...	5,647	13	11	...	24	2,922	16	...	2,937	...	...
	1892-93	1	4,651	...	4,652	17	3	...	20	2,899	34	...	2,933	...	...
Canals in Jati	1888-89	...	1,948	...	1,948	...	...	...	...	142	...	...	142	...	...
	1889-90	...	1,077	...	1,077	...	2	...	2	183	...	...	183	...	...
	1890-91	...	1,632	...	1,632	...	...	...	...	234	...	...	234	...	...
	1891-92	...	1,389	...	1,389	11	6	...	17	409	2	...	411	...	...
	1892-93	...	803	...	803	...	...	...	...	846	...	...	846	...	...
Khanta	1888-89	...	4,154	...	4,154	...	...	...	...	19	30	...	49	...	...
	1889-90	...	4,230	...	4,230	16	...	...	16	64	...	...	64	...	...
	1890-91	...	5,117	...	5,117	...	...	...	...	48	...	...	48	...	...
	1891-92	...	6,013	...	6,013	...	9	...	9	18	14	...	32	...	...
	1892-93	...	3,990	...	3,990	...	...	...	...	87	65	...	154	...	...
Kokowari	1888-89	...	8,001	...	8,001	1	...	...	1	...	...	...	...	...	...
	1889-90	...	11,700	...	11,700	...	...	...	...	37	...	...	...	...	...
	1890-91	3	13,627	...	13,630	...	...	...	...	21	...	...	...	...	...
	1891-92	8	13,567	...	13,575	...	...	...	...	25	...	...	...	...	...
	1892-93	1	9,487	...	9,494	1	...	...	1	95	91	...	196	...	...
Canals in Shihbandar	1888-89	...	1,161	...	1,161	20	...	...	30	144	...	...	144	...	...
	1889-90	...	1,333	...	1,333	...	...	...	...	215	...	...	215	...	...
	1890-91	...	1,683	...	1,683	...	...	...	...	178	...	...	178	...	...
	1891-92	...	1,762	...	1,762	3	...	...	3	177	...	...	177	...	...
	1892-93	...	1,304	...	1,304	1	2	...	6	343	16	...	250	...	...
Bunhi, Left Bank...	1888-89	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1891-92	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1892-93	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bunhi, Right Bank	1888-89	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1889-90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1890-91	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1891-92	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1892-93	...	...	...	...	...	...	...	...	...	...	...	...	...	...

[illegible]

Wheat.				Barley.				Oatseeds.				Babul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
...	57	...	57	9	837	...	836	5	1,163	...	1,168	...	...
...	164	...	164	75	2,611	...	2,786	1	1,457	...	3,498	...	...
...	36	...	32	33	434	...	463	17	1,131	...	1,748	...	...
...	47	...	50	...	563	...	564	20	855	...	875	...	...
...	41	...	41	16	2,137	...	2,153	...	4,229	...	4,229	...	459
...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	15	...	17	2	195	...	197	...	440	...	440	...	...
4	51	...	55	...	412	...	412	...	1,146	...	1,146	...	...
...	16	...	16	...	94	...	94	...	1,638	...	1,636	...	...
...	128	...	128	...	266	...	266	...	318	...	318	...	...
...	59	...	59	...	945	...	945	...	1,532	...	1,532	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	6	...	6	...	212	...	212	2	48	...	50	...	...
...	4	...	4	1	883	...	883	...	509	...	509	...	...
...	1	...	1	...	159	...	159	...	275	...	275	...	...
...	...	...	...	...	592	...	592	...	457	...	457	...	...
...	25	...	25	...	2,275	...	2,275	...	1,107	...	1,107	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	8	99	...	107	...	62	...	62	...	...
...	...	...	...	...	249	...	249	...	44	...	44	...	...
...	...	...	...	...	245	...	245	...	116	...	116	...	...
...	...	...	...	...	49	...	49	5	39	...	39	...	...
...	...	...	...	116	599	...	715	21	349	...	481	...	144
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	72	...	12	...	49	...	49	...	...
...	...	...	...	...	199	...	199	...	237	...	237	...	...
...	...	...	...	...	392	...	392	...	14	...	14	...	...
...	...	...	...	...	103	...	103	...	686	...	686	...	...
...	...	...	...	...	1,573	...	1,573	...	...	...	...	...	...
...	...	...	...	...	63	...	63	...	30	...	30	...	...
...	...	...	...	...	221	...	221	...	31	...	31	...	...
...	...	...	...	...	59	...	59	...	35	...	35	...	...
...	...	...	...	...	78	...	78	...	35	...	35	...	...
...	...	...	...	...	40	...	40	6	289	...	295	...	...
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...	...	...	...	...	48	...	48	...	24	...	24	...	...
...	...	...	...	...	61	...	62	...	111	...	111	...	...
...	...	...	...	5	173	...	176	...	48	...	48	...	...
...	...	...	...	9	89	...	98	22	53	...	75	...	...
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...	...	...	...	...	12	...	12	...	5	...	5	...	...
...	...	...	...	...	...	...	...	...	198	...	193	...	...
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—concluded.

Crops.										Total Cultivation.				REMARKS.
Plantation.		Other Crops.				Total Rabi.								
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	
Acres.		Area in Acres.				Area in Acres.				Area in Acres.				
...	...	127	148	...	275	141	2,135	...	2,276	4,687	62,041	...	66,928	
...	...	158	2,763	...	2,921	235	7,965	...	8,200	4,796	73,153	...	77,948	
...	...	77	826	...	903	128	2,420	...	2,548	5,573	64,570	...	69,448	
...	...	140	486	...	626	163	1,951	...	2,114	4,324	61,599	...	66,223	
...	459	164	2,718	...	2,882	180	9,584	...	9,764	4,137	70,005	...	74,142	
...	...	...	129	...	129	4	779	...	783	3,314	10,584	...	13,898	
...	...	...	420	...	420	4	2,029	...	2,033	4,222	13,521	...	17,743	
...	...	...	659	...	659	...	2,405	...	2,405	3,383	12,835	...	16,168	
...	...	...	433	...	433	...	1,137	...	1,137	3,558	11,020	...	14,608	
...	6	6	429	...	435	6	2,401	...	2,407	5,458	10,698	...	14,051	
...	...	...	81	...	81	2	347	...	349	836	6,032	...	6,869	
...	2	110	...	...	112	3	1,511	...	1,514	1,009	6,852	...	7,861	
...	...	55	...	...	56	1	490	...	491	689	6,652	...	7,321	
...	...	...	29	...	29	...	1,078	...	1,078	453	6,749	...	7,306	
...	...	3	633	...	636	3	4,040	...	4,043	1,008	9,270	...	10,278	
...	...	10	36	...	46	18	197	...	215	3,440	5,109	...	8,569	
...	...	9	164	...	173	9	457	...	466	3,077	5,636	...	9,543	
...	...	157	340	...	497	157	701	...	858	3,325	7,081	...	10,306	
...	...	...	29	...	36	12	167	...	179	3,509	6,076	...	9,585	
...	144	15	507	...	522	222	1,590	...	1,813	3,500	6,459	...	9,959	
...	...	1	1	...	2	1	13	...	14	107	1,651	...	2,132	
...	...	...	8	...	8	...	256	...	256	370	1,841	...	2,051	
...	...	...	13	...	13	...	572	...	572	368	2,196	...	2,464	
...	...	...	33	...	33	...	150	...	150	612	1,654	...	2,076	
...	...	1	106	...	101	1	2,659	...	2,660	869	5,462	...	4,351	
...	...	...	...	...	...	...	93	...	93	73	4,559	...	4,632	
...	...	...	...	...	...	...	252	...	252	141	4,692	...	5,003	
...	...	...	13	...	13	...	106	...	106	79	5,337	...	5,415	
...	...	...	...	...	...	...	67	...	67	62	5,345	...	5,407	
...	4	34	661	...	661	40	960	...	1,000	162	5,338	...	5,500	
...	...	...	94	...	94	...	102	...	102	9	8,202	...	8,211	
...	...	...	293	...	293	...	335	...	335	89	12,252	...	12,345	
...	...	...	494	...	494	...	667	...	667	88	13,359	...	13,427	
...	...	...	535	...	535	5	754	...	759	123	14,398	...	14,521	
...	40	1,301	...	1,341	71	1,448	...	1,514	232	11,155	...	11,387		
...	...	...	2	...	2	...	12	...	12	183	1,224	...	1,406	
...	...	...	44	...	44	...	77	...	77	245	1,449	...	1,694	
...	...	...	83	...	83	...	123	...	123	182	1,845	...	2,027	
...	...	...	46	...	46	...	51	...	51	303	1,831	...	2,034	
...	11	227	...	228	11	482	...	485	269	1,775	...	2,044		
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...	...													

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

Abstract of Crop Return of Government Land for five years.

Crops.	1888-89.			1889-90.			1890-91.			1891-92.			1892-93.			Percentage of Flow and Lft.			Percent of Area and Lft.	
	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.		
Beckri Canal District.																				
Kharif.																				
Rice	21,312	12,732	34,044	11,884	11,884	23,768	25,653	105,440	131,093	15,092	63,583	78,675	17,374	92,319	109,993	16	99	100	...	
Wheat	1,346	12,781	14,127	2,654	14,183	16,837	4,579	21,957	26,536	4,313	12,237	16,550	2,583	34,012	40,712	16	94	100	...	
Barley	17	62,594	62,611	1,179	3,197	4,376	1,696	48,382	49,978	1,801	7,164	8,965	1,970	32,386	40,712	2	99	100	...	
Cotton	5,951	8,276	14,227	3,148	44,227	47,375	1,569	31,977	33,546	3,682	46,492	50,174	2,170	32,386	40,712	2	97	100	...	
Other crops	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	31,817	218,210	250,027	32,011	218,216	250,227	31,801	167,618	199,419	31,658	127,448	159,106	21,160	171,423	193,076	11	89	100	77	
Rabi.																				
Wheat	88	9,162	9,250	3	9,337	9,340	31	10,814	10,845	644	21,069	21,012	22	11,384	11,367	...	100	100	...	
Barley	2,653	14,561	17,214	69	4,092	4,161	135	7,624	7,759	1,569	30,430	40,416	2,618	33,623	36,241	7	63	100	...	
Oilseeds	61	3,060	3,121	1,859	1,859	3,718	61	6,093	6,713	76	10,610	10,610	61	10,140	10,211	...	20	100	...	
Other crops	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	2,845	27,408	30,253	1,962	15,337	17,300	394	24,472	26,796	2,220	69,919	72,139	2,708	55,610	58,318	6	95	100	23	
Grand Total	34,282	245,708	280,560	33,973	233,703	268,650	32,004	192,090	226,155	34,306	197,367	221,245	23,868	227,034	253,394	9	91	100	100	
Kharif.																				
Rice	20,252	26,035	46,287	7	39,465	39,472	18	32,646	33,661	47,631	32,084	33,081	2	26,957	36,909	...	160	100	...	
Wheat	1,372	1,718	3,090	1,372	4,775	6,147	1,130	6,491	7,621	...	27,059	27,059	...	47,210	76,250	...	62	100	...	
Barley	432	4,386	4,818	1,432	1,656	3,088	1,130	1,865	3,024	...	747	1,000	...	4,384	4,384	...	20	74	...	
Cotton	1,432	9,158	10,590	671	8,225	8,896	303	4,016	4,382	1,024	4,140	6,164	707	6,053	6,310	...	20	91	...	
Other crops	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	24,170	76,282	100,452	29,623	66,200	95,823	21,615	72,410	93,425	19,812	61,856	81,458	21,259	84,151	112,407	29	12	100	66	
Rabi.																				
Wheat	3,092	51,254	54,346	926	16,446	17,372	473	21,635	22,651	2,269	44,615	47,011	739	66,053	68,701	1	99	100	...	
Barley	41	1,265	1,306	255	1,626	1,881	302	2,535	2,837	1,369	1,369	1,369	216	2,454	2,454	...	97	100	...	
Oilseeds	382	1,716	2,098	323	1,405	1,728	221	2,477	2,698	313	2,558	3,171	216	4,152	4,152	...	5	98	...	
Other crops	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	3,855	54,231	58,086	1,506	18,730	19,239	526	27,689	29,166	2,812	48,587	51,709	699	74,201	78,184	1	99	100	40	
Grand Total	32,771	101,416	134,188	30,943	108,270	139,313	21,630	99,400	121,151	21,841	113,733	135,577	32,256	150,355	186,601	17	83	100	100	
Kharif.																				
Rice	10,646	84,623	95,269	...	121,849	121,849	8	102,397	102,405	...	150,436	150,436	...	150,183	150,183	...	160	100	...	
Wheat	327	4,370	4,697	327	4,370	4,697	327	4,370	4,697	...	4,370	4,370	...	4,370	4,370	...	19	81	...	
Barley	4,697	4,697	9,394	4,697	4,697	9,394	4,697	4,697	9,394	...	4,697	4,697	...	4,697	4,697	...	14	96	...	
Cotton	117	509	626	117	509	626	117	509	626	...	117	509	...	117	509	...	14	96	...	
Other crops	4,686	56,099	60,785	2,323	35,275	37,598	1,258	3,926	4,184	...	1,827	12,007	...	11,345	14,020	...	81	100	...	
Total	16,370	93,690	109,360	...	131,316	131,316	...	117,464	117,464	...	165,503	165,503	...	164,650	164,650	...	91	100	71	
Rabi.																				
Wheat	7,233	31,611	38,844	6,290	40,256	46,546	3,023	48,370	51,393	...	64,269	71,563	...	60,234	65,102	...	23	100	...	
Barley	615	8,437	9,052	615	9,052	9,667	615	9,052	9,667	...	14,810	16,864	...	217	217	...	88	100	...	
Oilseeds	389	4,697	5,086	389	4,697	5,086	389	4,697	5,086	...	5,086	5,086	...	5,086	5,086	...	97	100	...	
Other crops	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	8,237	44,745	53,986	7,294	53,986	61,300	3,927	67,519	76,146	...	84,165	93,513	...	81,607	87,105	...	94	100	29	
Grand Total	23,006	261,720	284,726	20,649	206,483	237,912	15,158	202,892	218,350	...	27,266	306,060	...	313,221	332,450	...	91	100	100	

Shikarpur Canal District.

Crops.	1888-89.			1889-90.			1890-91.			1891-92.			1892-93.			PERCENTAGE OF FLOW AND LIFT.			Percent- age of Kharif and Rabi.
	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	Lift.	Flow.	Total.	
Kharif.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	...
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Total	36,372	124,996	171,368	38,111	143,733	181,844	28,746	146,724	175,470	29,403	140,654	170,057	33,684	124,968	158,652	21	79	100	73
Rabi.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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Total	405	823	1,228	785	1,881	2,666	49	1,094	1,072	10	2,620	2,639	62	2,682	2,164	4	96	100	...
Kharif.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	37,472	113,818	151,290	40,269	169,623	209,892	28,767	164,772	193,539	30,268	160,401	189,669	32,454	166,969	202,422	13	82	100	100
Kharif.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	541,311	1,107,275	1,648,586	589,394	1,135,436	1,724,830	553,842	1,032,113	1,585,960	548,578	964,901	1,513,430	585,434	1,046,658	1,632,092	36	64	100	73
Rabi.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	40,944	186,338	227,282	52,362	256,149	308,511	23,257	205,192	228,449	63,266	297,621	461,347	73,742	253,125	326,867	12	88	100	27
Grand Total	583,225	1,293,223	1,876,448	641,661	1,401,585	1,933,341	607,000	1,337,310	1,914,409	612,114	1,262,728	1,974,698	609,177	1,251,181	1,829,955	39	70	100	100

* Includes 2,179 acres of Dubai.

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TABLE VIII-A.
CROP RETURN

FOR

1892-93.

FOR GOVERNMENT AND JAGHIR LANDS.

TABLE
CROP RETURN,

														KHARIF.	
														CLASS OF	
Canals.	Year.	Rice.				Jowari.				Bajri.				Cot.	
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Desert Canal— Government...	1892-93...	...	603	...	603	1,760	23,862	...	31,622	476	10,046	...	10,522	...	21
Foreign Jaghir...	1892-93...	...	140	...	140	6,900	20,832	...	27,732	...	3,365	...	3,365	9	28
	1892-93...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1892-93...	...	140	...	140	6,900	20,832	...	27,732	...	3,365	...	3,365	9	28
Total...	...	...	743	...	743	8,660	50,694	...	59,354	476	13,411	...	13,887	9	59
Ubarwah— Government...	1892-93...	...	631	...	631	691	6,576	...	7,177	308	7,542	...	7,850	...	165
Begri— Government...	1892-93...	...	7,031	...	7,031	14,994	55,621	...	70,615	1,599	16,277	...	17,876	1	87
Foreign Jaghir...	1892-93...	...	377	...	377	3,590	10,032	...	13,532	50	1,617	...	1,667	2	48
	1892-93...	...	33	...	33	895	3,327	...	4,222	110	904	...	414	...	...
	1892-93...	...	410	...	410	4,895	13,359	...	17,754	160	1,921	...	2,081	2	48
Total...	...	...	7,441	...	7,441	19,399	68,990	...	88,269	1,259	18,198	...	19,867	3	135
Kashmir Bund— Government...	1892-93...	...	18	...	18	19	260	...	279	...	176	...	176	6	115
Total, Begri Canal District	...	...	8,833	...	8,833	28,689	126,510	...	155,179	2,543	39,323	...	41,871	18	471
Nara Supply Channel— Government...	1892-93...	...	...	...	...	739	7	...	746	5	3	...	9	3	6
Jaghir...	1892-93...	...	...	...	...	...	173	...	173	...	1	...	1	...	...
Total...	...	...	...	...	...	739	180	...	919	5	4	...	9	3	6
Eastern Nara— Government...	1892-93...	...	5,119	...	5,119	85	22	...	107	2,049	14,553	...	14,602	124	658
Mithrao Canal— Government...	1892-93...	...	58,370	...	58,370	485	230	...	724	18,787	6,811	...	25,598	5,216	1,233
Jaghir...	1892-93...	...	74	...	74	...	...	...	...	...	323	...	323	...	...
Total...	...	...	58,444	...	58,444	485	230	...	724	18,787	7,134	...	25,921	8,216	1,233
Dunwah— Government...	1892-93...	...	...	...	...	223	14	...	237	3,221	750	...	3,971	1,022	51
Heranwah— Government...	1892-93...	...	59	...	59	165	22	...	187	1,140	373	...	* 1,513	660	5
Khupra Canal— Government...	1892-93...	...	...	...	...	4	5	...	9	975	5,057	...	6,032	23	64
Thar Canal— Government...	1892-93...	...	28,984	...	28,984	20	29	...	49	3,189	5,310	...	8,509	808	1,032
Jaghir...	1892-93...	...	1,623	...	1,623	...	11	...	11	84	790	...	874	63	34
Total...	...	...	30,607	...	30,607	20	40	...	60	3,283	6,100	...	9,383	871	1,066
Total, Eastern Nara District	...	...	94,229	...	94,229	1,721	322	...	2,243	29,490	33,971	...	63,431	10,922	3,418
Canals in Rohri— Government...	1892-93...	2	5,692	...	5,694	16,874	34,811	...	51,685	693	2,735	...	3,428	261	627
Jaghir...	1892-93...	...	682	...	682	435	3,087	...	3,542	66	71	...	137	11	126
Total...	...	2	5,734	...	5,736	17,329	37,898	...	55,227	759	2,806	...	3,565	273	753
Ind Canal— Government...	1892-93...	...	21,831	...	21,935	12,196	12,399	...	24,595	456	510	...	966	14	29
Jaghir...	1892-93...	...	1,556	...	1,556	1,163	820	...	1,983	25	10	...	41	...	...
Total...	...	...	23,491	...	23,491	13,359	13,219	...	26,578	481	520	...	1,007	14	32
Total, Shikarpar Canals District	...	2	28,225	...	28,227	30,683	51,117	...	81,805	1,210	3,332	...	4,572	289	785

Cross.

ton.		Babul Plantation.				Other Crops.				Total Kharif.			
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.
Acres.		Area in Acres.				Area in Acres.				Area in Acres.			
...	21	...	...	...	...	133	7,462	...	7,595	2,300	47,994	...	50,363
...	47	...	...	...	...	109	1,609	...	1,709	7,009	25,994	...	32,993
...	47	...	...	...	...	100	1,609	...	1,709	7,009	25,994	...	32,993
...	63	...	...	...	...	233	9,071	...	9,304	9,378	73,978	...	83,356
...	163	...	...	...	...	74	3,864	...	3,938	983	18,779	...	19,761
...	88	...	5	...	5	1,168	27,638	...	28,806	17,762	106,949	...	1,24,611
...	50	...	...	...	...	750	4,641	...	5,391	5,302	15,115	...	21,017
...	...	...	...	...	...	102	639	...	631	1,107	4,863	...	5,479
...	50	...	...	...	...	852	5,340	...	6,192	5,409	20,078	...	26,487
...	133	...	5	...	5	9,020	33,168	...	35,188	34,171	126,927	...	161,098
...	118	...	...	...	...	1	237	...	238	26	803	...	829
...	489	...	5	...	5	2,328	46,340	...	48,668	34,558	220,487	...	255,045
...	9	...	...	...	...	28	...	...	28	775	16	...	791
...	...	...	...	...	...	...	...	...	...	...	174	...	439
...	9	...	...	...	...	28	...	...	28	775	190	...	965
...	1,082	...	...	...	...	82	599	...	681	2,340	21,251	...	23,591
...	9,449	...	...	...	...	2,309	3,140	...	5,449	29,797	69,793	...	99,590
...	...	...	...	...	...	...	32	...	32	...	425	...	457
...	9,449	...	...	...	...	2,309	3,172	...	5,481	29,797	70,222	...	100,019
...	1,106	...	...	...	...	453	86	...	539	4,902	931	...	5,833
...	665	...	...	...	...	119	413	...	532	3,664	672	...	2,656
...	87	...	...	...	...	13	78	...	91	1,615	5,204	...	6,219
...	1,840	...	...	...	...	508	2,691	...	3,397	4,533	38,246	...	42,779
...	97	...	...	...	...	11	305	...	316	168	2,768	...	2,921
...	1,937	...	...	...	...	517	3,196	...	3,713	4,691	41,009	...	45,700
...	14,335	...	...	...	...	3,501	7,244	...	10,745	45,694	139,378	...	194,963
...	891	...	2	...	2	111	1,296	...	1,407	17,944	44,523	...	62,467
...	137	...	...	...	...	1	139	...	140	533	4,105	...	4,638
...	1,028	...	2	...	2	112	1,435	...	1,547	18,477	49,628	...	67,105
...	43	...	111	...	111	646	2,644	...	3,290	13,312	37,688	...	50,940
...	...	...	3	...	3	47	143	...	190	1,235	2,541	...	3,775
...	46	...	114	...	114	693	2,787	...	3,480	14,547	40,169	...	54,716
...	1,074	...	116	...	116	805	4,522	...	5,027	33,024	89,797	...	1,21,821

RABL

CLASS OF

Wheat.				Barley.				Oil-seeds.				Bâbul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
...	2,973	...	2,972	...	4	...	4	5	4,864	...	4,869	...	...
...	168	...	168	...	...	...	...	...	...	...	...	...	...
...	168	...	168	...	...	...	...	...	...	...	...	...	...
...	3,140	...	3,140	...	4	...	4	5	4,864	...	4,869	...	...
...	1,967	...	1,967	...	19	...	19	5	1,491	...	1,496	...	...
23	4,424	...	4,447	13	50	...	63	2,638	27,547	...	30,185	...	5
...	47	...	47	...	2	...	2	...	310	...	310	...	...
...	153	...	153	...	...	...	...	...	...	...	...	...	...
...	200	...	200	...	2	...	2	...	310	...	310	...	...
23	4,624	...	4,647	13	52	...	65	2,638	27,557	...	30,195	...	5
...	1,971	...	1,971	...	40	...	40	...	31	...	31	...	...
23	11,702	...	11,725	13	114	...	127	2,648	34,343	...	36,991	...	5
74	9,455	...	9,532	...	8	...	8	...	601	...	601	...	...
...	1,088	...	1,088	...	7	...	7	...	85	...	85	...	...
74	10,546	...	10,590	...	15	...	15	...	686	...	686	...	...
450	5,302	...	5,752	12	35	...	47	372	10,559	...	10,941	...	...
7,642	10,467	...	18,109	80	64	...	144	1,276	2,348	...	3,624	...	...
...	9	...	9	...	...	...	...	...	...	...	...	...	...
7,642	10,476	...	18,118	80	64	...	144	1,276	2,348	...	3,624	...	...
596	44	...	630	...	...	...	...	26	184	...	210	...	...
13	6	...	18	...	...	...	...	8	9	...	17	...	22
14	304	...	218	...	...	...	...	173	863	...	1,036	...	...
158	30	...	188	6	3	...	9	165	577	...	742	...	...
...	...	...	...	...	...	...	...	21	144	...	165	...	...
162	30	...	192	6	3	...	9	186	721	...	907	...	...
8,941	26,807	...	35,548	98	117	...	215	2,041	15,380	...	17,421	...	22
548	56,011	...	56,557	5	179	...	184	23	2,774	...	2,797	...	22
90	2,510	...	2,600	2	10	...	12	...	47	...	47	...	7
636	58,521	...	59,157	7	180	...	186	23	2,821	...	2,844	...	29
192	10,012	...	10,224	1	26	...	27	7	630	...	637	...	11
38	341	...	374	...	5	...	5	...	32	...	32	...	...
225	10,382	...	10,608	1	31	...	32	7	662	...	669	...	41
881	68,904	...	69,755	8	220	...	228	39	5,483	...	5,513	...	40

Crops.										Total Cultivation.				REMARKS.	
Plantation.		Other Crops.				Total Rubi.									
Spill except from Government Canals.	Total.	Life.	Flow.	Spill except from Government Canals.	Total.	Life.	Flow.	Spill except from Government Canals.	Total.	Life.	Flow.	Spill except from Government Canals.	Total.		
Acres.		Area in Acres.				Area in Acres.				Area in Acres.					
...	...	...	653	...	653	5	8,498	...	8,498	2,374	56,487	...	56,961	Includes 530 Dubari cultivation.	
...	...	...	3,061	...	3,061	...	3,832	...	3,832	7,009	29,816	...	26,825		
...	...	...	3,661	...	3,661	...	3,832	...	3,832	7,009	29,816	...	26,825		
...	...	...	4,317	...	4,317	5	12,325	...	12,325	9,383	56,363	...	26,646		
...	...	...	335	...	335	5	3,912	...	3,912	968	22,580	...	23,578	Includes 301 Dubari cultivation.	
...	5	79	8,914	...	8,993	2,753	40,910	...	43,663	20,515	147,789	...	168,304	Includes 8,320 Dubari cultivation 1000 unauthorized cultivation. 8,454	
...	...	...	5,621	...	5,624	...	5,671	...	5,671	5,302	21,386	...	24,688		
...	...	...	51	...	51	...	516	...	516	1,107	4,879	...	5,986		
...	...	...	5,675	...	5,675	...	6,167	...	6,167	6,409	26,265	...	32,674		
...	5	79	14,549	...	14,668	2,753	47,127	...	49,880	26,921	174,031	...	200,978		
...	...	...	5	233	...	238	5	2,375	...	2,380	31	3,078	...	3,109	Includes 15 Dubari cultivation.
...	5	81	10,474	...	10,558	2,753	65,538	...	68,296	37,326	286,025	...	323,331	Includes 9,190 Dubari cultivation. 101 unauthorized cultivation. 9,300	
...	...	...	6	388	...	334	80	10,385	...	10,475	855	10,411	...	11,266	
...	...	...	1	...	...	1	...	1,191	...	1,191	1,338	...	1,338		
...	...	...	6	329	...	333	69	11,676	...	11,656	885	11,766	...	12,621	
...	...	...	106	7,597	...	7,793	1,056	23,508	...	24,523	3,370	41,754	...	45,121	Includes Dubari 2,107.
...	...	...	119	2,023	...	2,142	9,117	14,902	...	24,019	38,914	34,693	...	128,699	Includes Dubari 2,715.
...	...	...	...	...	...	...	...	9	...	9	...	438	...	438	
...	...	...	119	2,023	...	2,142	9,117	14,911	...	24,028	39,011	83,133	...	124,047	
...	...	...	6	1	...	7	618	229	...	847	5,520	1,100	...	6,629	Includes Dubari 106.
...	22	...	8	...	8	21	43	...	65	2,105	616	...	...	2,721	Includes Dubari 4.
...	...	...	6	31	...	37	103	1,068	...	1,291	1,208	6,302	...	7,510	Includes Dubari 318.
...	...	...	79	2,238	...	2,317	408	2,848	...	3,256	4,941	41,091	...	46,035	Includes Dubari 2,167.
...	...	...	1	...	...	1	26	144	...	170	134	2,967	...	3,061	
...	...	...	90	2,238	...	2,318	431	3,992	...	3,418	5,125	41,091	...	46,126	
...	22	413	12,227	...	12,640	11,493	54,733	...	65,948	57,097	193,732	...	250,829	Includes Dubari 7,417.	
...	...	...	22	28	...	2,640	692	61,618	...	62,220	18,586	106,141	...	124,687	Includes 127 unauthorized.
...	7	2	2,632	...	111	94	2,083	...	2,777	627	6,788	...	7,415		
...	29	30	2,741	...	2,771	696	64,301	...	64,997	10,173	112,929	...	132,102		
...	...	...	11	163	1,617	...	2,063	388	12,584	...	12,674	15,700	...	63,914	Includes 529 unauthorized.
...	...	...	43	62	...	103	26	440	...	516	1,311	2,981	...	4,292	
...	...	...	11	241	1,939	...	2,170	466	15,026	...	15,390	15,911	...	68,206	
...	...	...	40	261	4,690	...	3,941	1,160	17,327	...	76,497	34,184	...	200,308	

CROP RETURN,

		KHARIF.													
		CLASS OF													
Canals.	Year.	Rice.				Jonari.				Bajri.				Cotton.	
		Lift.	Flow.	Spill except from Govern- ment Canals.	Total.	Lift.	Flow.	Spill except from Govern- ment Canals.	Total.	Lift.	Flow.	Spill except from Govern- ment Canals.	Total.	Lift.	Flow.
Sukkur Canals— Government... Jaghir...	1892-93 1892-93	...	36,849 412	...	26,369 412	7,417 404	11,689 635	...	19,106 1,029	377 7	540 8	...	917 15	6 7	20 1
Total	...	...	27,281	...	27,281	7,821	12,314	...	21,135	384	548	...	932	13	21
Ghar Canal— Government... Jaghir...	1892-93 1892-93	1	123,319 3,361	...	128,320 3,361	5,586 62	45,323 4,424	...	50,911 4,486	182 21	2,844 ...	...	3,026 21	16 49	79 49
Total	...	1	126,680	...	128,681	5,648	49,749	...	55,397	182	2,865	...	3,047	16	128
Total, Ghar Canals District	...	1	158,961	...	158,962	13,469	62,063	...	75,532	566	3,413	...	3,979	29	149
Western Nara— Government... Jaghir...	1892-93 1892-93	...	58,878 1,256	...	58,878 1,256	26,205 965	43,003 4,150	...	69,808 5,115	1,697 88	3,399 358	...	5,096 446	107 11	72 11
Total	...	...	60,134	...	60,134	27,170	47,153	...	74,323	1,785	3,757	...	5,542	107	*83
Manchar— Government...	1892-93	...	...	...	...	179	84	...	263	15	19	...	34	...	...
Aral— Government... Jaghir...	1892-93 1892-93	...	...	...	...	1,394 39	123 109	...	1,517 148	29 26	27 76	...	56 102	...	...
Total	...	...	...	...	...	1,433	232	...	1,665	56	103	...	163	...	...
Prichard Canal— Government...	1892-93	...	323	...	323	801	2,315	...	3,116	61	141	...	202	3	3
Wahur— Government...	1892-93	...	8	...	8	1,914	1,065	...	3,009	148	284	...	412	1	5
Marvi— Government...	1892-93	...	2	...	2	1,628	433	...	2,061	82	38	...	120	...	...
Palta— Government... Jaghir...	1892-93 1892-93	...	538 ...	...	538 ...	6,105 543	10 ...	...	5,195 543	789 136	30 ...	...	819 136	...	...
Total	...	...	538	...	538	6,648	90	...	5,738	925	30	...	955	...	...
New Feeder Western Nara— Government...	1892-93	...	43	...	43	352	163	...	515	18	...	...	18	4	5
Dado Canals— Government... Jaghir...	1892-93 1892-93	...	8 ...	...	8 ...	5,021 168	1,512 1	...	6,533 169	1,866 3	401 12	...	2,267 15	1 1	2
Total	...	...	8	...	8	5,189	1,513	...	7,002	1,899	413	...	2,282	2	2
Total, Western Nara District	...	...	61,056	...	61,056	44,314	53,378	...	97,692	4,055	4,765	...	9,723	117	88
Fuleli— Government... Jaghir...	1892-93 1892-93	5 31	123,628 25,096	...	123,633 25,127	3,363 559	2,267 132	...	4,630 691	69,675 16,138	15,026 1,933	...	84,631 18,071	10,083 2,358	1,683 150
Total	...	36	148,724	...	148,760	2,922	3,399	...	5,321	85,743	16,959	...	102,702	12,441	1,833
Other Canals— Government... Jaghir...	1892-93 1892-93	3 ...	7,661 19	...	7,663 29	308 2	36 ...	...	344 ...	6,496 596	412 ...	...	6,910 596	43 ...	14
Total	...	3	7,680	...	7,692	310	36	...	346	7,094	412	...	7,508	43	14
Total, Fuleli Canals District	...	39	156,413	...	156,452	3,232	2,435	...	5,667	92,837	17,371	...	110,208	12,484	1,847
Mehrtaoh— Government... Jaghir...	1892-93 1892-93	...	12 ...	...	12 ...	4,425 23	290 49	...	4,715 72	2,800 2	97 23	...	2,987 25	91 ...	4
Total	...	...	12	...	12	4,448	339	...	4,787	2,822	120	...	3,012	91	4
Nasrat— Government... Jaghir...	1892-93 1892-93	21 ...	128 ...	...	162 ...	10,194 150	3,722 228	...	13,916 388	2,741 10	358 ...	...	3,096 10	122 7	63 8
Total	...	24	128	...	162	10,344	3,960	...	14,304	2,751	358	...	3,109	129	61
Naolahi— Government... Jaghir...	1892-93 1892-93	2 ...	242 50	...	144 594	18,506 894	5,830 430	...	24,336 1,231	9,032 337	1,903 34	...	10,327 37	161 10	27 9
Total	...	2	292	...	204	19,310	6,260	...	25,370	9,369	1,938	...	10,708	171	35
Dambro— Government... Jaghir...	1892-93 1892-93	3 ...	1 ...	...	3 ...	4,319 243	391 52	...	4,710 295	3,722 367	189 62	...	3,911 429	24 ...	1
Total	...	3	1	...	3	4,563	443	...	5,005	4,099	251	...	4,340	24	1

Crops.

Spill except from Govern- ment Canals.	Total.	Babul plantation.				Other Crops.				Total Kharif.			
		Lift.	Flow.	Spill except from Govern- ment Canals.	Total.	Lift.	Flow.	Spill except from Govern- ment Canals.	Total.	Lift.	Flow.	Spill except from Govern- ment Canals.	Total.
Acres.		Area in Acres.				Area in Acres.				Area in Acres.			
...	26	2	79	...	81	2,194	7,494	...	9,688	9,590	46,661	...	56,657
...	8	...	...	...	...	14	60	...	74	432	1,166	...	1,538
...	34	2	79	...	81	2,208	7,554	...	9,762	10,428	47,797	...	58,225
...	95	...	92	...	92	550	3,573	...	4,228	6,335	175,337	...	181,672
...	49	...	...	...	...	108	108	...	104	62	7,963	...	8,025
...	144	...	92	...	92	550	3,786	...	4,336	6,397	183,300	...	189,697
...	178	2	171	...	173	2,738	11,910	...	14,698	16,825	231,097	...	247,922
...	179	18	143	...	161	723	2,333	...	3,066	35,790	107,838	...	136,555
...	11	...	...	...	...	9	81	...	90	1,063	5,856	...	6,918
...	100	18	143	...	161	732	2,414	...	3,156	29,822	119,684	...	143,506
...	...	...	...	...	...	3	4	...	7	197	107	...	304
...	...	...	...	...	...	1	40	...	50	1,423	150	...	1,573
...	...	...	...	...	...	1	49	...	50	244	300	...	300
...	...	...	...	...	...	1	49	...	50	1,429	384	...	1,873
...	6	...	1	...	1	...	3	...	3	865	2,486	...	3,651
...	6	...	1	...	1	6	1	...	7	2,069	1,375	...	3,444
...	...	...	3	...	3	5	1	...	6	1,715	477	...	2,192
...	...	...	...	...	...	81	...	...	51	5,945	658	...	6,603
...	...	...	...	...	...	5	...	...	5	684	...	...	684
...	...	...	...	...	...	56	...	...	56	6,028	658	...	7,257
...	9	...	...	...	...	...	4	...	4	374	215	...	559
...	3	...	...	...	...	37	4	...	41	6,925	2,227	...	9,152
...	1	...	...	...	...	...	...	...	...	172	18	...	185
...	4	...	...	...	...	87	4	...	41	7,097	2,240	...	9,337
...	215	18	149	...	167	550	2,480	...	3,330	50,257	121,926	...	172,183
...	11,766	321	741	...	1,062	6,095	1,461	...	7,556	88,472	141,506	...	233,276
...	2,508	...	...	...	...	1,789	527	...	2,316	10,376	27,838	...	45,713
...	14,374	321	741	...	1,062	7,884	1,988	...	9,872	169,347	172,644	...	281,961
...	67	9	117	...	126	377	68	...	475	7,238	8,373	...	15,575
...	...	...	...	...	...	40	7	...	56	647	36	...	683
...	57	9	117	...	126	426	105	...	531	7,885	8,373	...	16,258
...	14,331	330	858	...	1,188	8,310	2,043	...	10,403	117,332	181,017	...	298,249
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	85	630	...	...	630	697	305	...	1,002	8,738	798	...	9,531
...	...	...	...	...	...	15	55	...	70	40	127	...	167
...	93	630	...	...	630	212	450	...	1,162	8,773	925	...	9,698
...	275	...	...	...	...	1,547	1,928	...	3,475	14,028	6,189	...	20,817
...	15	...	...	...	...	2	3	...	5	169	249	...	418
...	190	...	...	...	...	1,549	1,931	...	3,480	14,797	6,438	...	21,235
...	188	...	...	...	...	5,639	2,308	...	8,037	33,340	9,702	...	43,042
...	19	...	...	...	...	68	89	...	157	1,219	622	...	1,841
...	207	...	...	...	...	5,707	2,467	...	8,194	34,559	10,324	...	44,883
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	25	...	...	...	...	493	86	...	579	8,561	667	...	9,228
...	...	...	...	...	...	53	16	...	69	663	131	...	794
...	25	...	...	...	...	540	102	...	643	9,224	798	...	10,022

RABI.

CLASS OF

Wheat.				Barley.				Oil-seeds.				Babul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
4,493 14	20,771 628	...	25,253 642	30	64 1	...	94 1	631	2,314 4	...	2,945 4	...	63
4,496	21,399	...	25,995	30	65	...	95	631	2,318	...	2,949	...	63
166	39,773 493	...	39,939 493	5	153	...	158	35	21,151 1,572	...	21,186 1,572	...	17
166	40,206	...	40,432	5	153	...	158	35	23,023	...	23,058	...	17
4,602	61,665	...	66,327	35	218	...	253	666	25,341	...	26,007	...	80
15,323 760	38,196 971	...	53,409 1,731	487 219	2,168 50	...	2,655 269	3,015 241	23,694 3,036	...	26,709 3,277	...	2
15,933	39,187	...	55,140	708	2,219	...	2,924	3,256	26,730	...	29,986	...	2
1,009	7,192	...	8,192	...	100	...	100	23	2,407	...	2,423	...	1
1,414 243	5,067 2,141	...	7,451 2,384	8 6	144 89	...	153 95	206 6	1,053 171	...	1,259 277	...	1
1,647	8,148	...	9,935	14	233	...	247	212	1,324	...	1,536	...	1
41	2,071	...	2,112	26	1,049	...	1,075	7	2,983	...	2,990	...	1
928	413	...	1,341	...	21	...	21	88	496	...	584	...	1
37	1,092	...	1,129	5	223	...	233	46	1,346	...	1,392	...	1
1,100	1,205	...	2,305	7	241	...	248	152 44	1,021 163	...	1,173 206	...	1
1,100	1,203	...	2,305	7	241	...	248	196	1,183	...	1,379	...	1
16	424	...	440	5	71	...	76	...	243	...	243	...	1
833 42	3,584 ...	...	4,419 45	51 13	590 ...	...	671 13	1,254 46	2,393 ...	...	3,647 46	...	1
880	3,684	...	4,464	94	590	...	694	1,300	4,393	...	3,693	...	1
21,672	63,286	...	84,958	857	4,761	...	5,608	6,127	39,099	...	45,226	...	3
301 97	16,158 1,411	...	15,459 1,506	22 18	3,490 393	...	3,902 390	406 131	16,101 6,360	...	16,507 6,520	118	6,823
338	16,569	...	16,567	40	4,242	...	4,382	537	21,490	...	22,027	118	6,823
46	2,036	...	2,082	4	60	...	64	65	1,702 2	...	1,767 2	...	65
46	2,086	...	2,082	4	60	...	64	65	1,704	...	1,769	...	65
443	18,605	...	19,049	44	4,302	...	4,346	602	23,194	...	23,796	118	8,688
924	49	...	1,043	9	1	...	10	142	56	...	108	...	7
994	49	...	1,043	9	1	...	10	142	56	...	108	...	7
2,782 12	1,434 130	...	4,216 132	19	12	...	31	445 1	224 21	...	669 32	...	32
2,794	1,554	...	4,348	19	12	...	32	446	245	...	691	...	32
2,925 33	1,944 21	...	4,868 54	28 1	39 5	...	67	1,054 2	770 17	...	1,824 19	...	114
2,957	1,985	...	4,982	29	44	...	73	1,056	782	...	1,843	...	114
949 2	405 ...	...	1,354 2	73 1	7 ...	...	80	939 1	238 1	...	1,177 2	...	16
951	405	...	1,356	74	7	...	81	940	239	...	1,179	...	16

1892-93—continued.

Crops.										TOTAL CULTIVATION.				REMARKS.	
plantation.															
		Other Crops.				Total Rabi.									
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.		
Acres.	Area in Acres.				Area in Acres.				Area in Acres.						
...	63	44	3,239	...	3,280	5,187	36,448	...	31,635	15,193	73,139	...	88,322		Includes 1,434 Dubari. 363 Unauthorized.
...	...	3	35	...	38	17	968	...	685	449	1,774	...	2,223		
...	63	47	3,271	...	3,318	5,204	27,116	...	32,320	15,632	74,913	...	90,545		1,787
...	17	14	4,151	...	4,165	220	65,245	...	65,465	6,555	240,582	...	247,137		Includes 1,501 Dubari. 602 Unauthorized.
...	...	...	129	...	129	...	2,494	...	2,494	62	10,457	...	10,519		
...	17	14	4,280	...	4,294	220	67,739	...	67,959	6,617	231,039	...	237,656		2,108
...	80	61	7,551	...	7,612	5,424	94,355	...	100,279	22,249	325,922	...	348,201		
...	2	1,943	13,972	...	15,918	20,671	78,022	...	98,693	49,431	185,550	...	235,281		Includes 9,713 Dubari. 106 Unauthorized.
...	...	78	1,457	...	1,535	1,295	5,514	...	6,812	2,390	11,370	...	13,739		
...	2	2,024	15,439	...	17,453	21,909	83,598	...	105,505	51,791	197,220	...	249,011		9,819
...	...	795	5,506	...	6,301	1,517	15,199	...	17,016	2,014	16,306	...	17,320		Includes Dubari 61.
...	...	23	257	...	280	1,681	7,461	...	9,142	3,104	7,811	...	10,715		Includes Dubari 799.
...	...	...	109	...	109	255	2,610	...	2,865	321	2,544	...	3,163		
...	...	23	306	...	389	1,936	10,071	...	12,007	3,425	10,453	...	13,880		
...	2	410	...	...	412	76	6,518	...	6,589	941	9,290	...	10,240		Includes Dubari 21.
...	3	61	...	...	64	1,010	991	...	2,010	3,068	2,366	...	5,454		Includes Dubari 305.
...	4	46	...	...	50	92	2,712	...	2,804	1,807	3,189	...	4,996		Includes Dubari 51.
...	1	33	484	...	517	2	2,952	...	4,244	7,237	3,610	...	10,847		Includes Dubari 621.
...	...	...	2	...	2	44	164	...	208	728	164	...	892		
...	1	33	486	...	519	1,336	3,116	...	4,452	7,965	3,774	...	11,739		
...	...	94	...	...	94	21	832	...	853	395	1,047	...	1,442		
...	...	61	342	...	405	2,231	6,909	...	9,140	6,156	9,136	...	18,292		Includes Dubari 2,127.
...	...	2	...	...	2	106	...	...	106	278	13	...	291		
...	63	342	...	...	405	2,237	6,908	...	9,246	9,434	9,149	...	18,593		
...	3	2,947	22,740	...	25,687	30,003	129,879	...	160,482	80,800	251,805	...	332,665		Exclusive of Forest cultivation 164 acres.
...	6,941	1,041	4,194	...	5,235	1,888	46,156	...	48,044	90,860	190,962	...	281,322		Includes Dubari 6,778.
...	...	490	819	...	1,309	736	7,981	...	8,717	21,611	35,819	...	57,430		
...	6,941	1,531	5,013	...	6,544	2,624	54,137	...	56,761	111,971	226,781	...	388,752		
...	65	60	205	...	265	175	4,068	...	4,243	7,413	12,465	...	19,818		Includes Dubari 1,035.
...	...	5	20	...	25	5	22	...	27	652	58	...	710		
...	65	65	225	...	290	180	4,060	...	4,270	8,045	12,463	...	20,528		
...	7,006	1,596	5,238	...	6,834	2,804	58,227	...	61,031	120,036	238,244	...	359,280		
...	7	253	17	...	270	1,598	120	...	1,528	10,181	928	...	11,059		Includes Dubari 1,035.
...	...	...	8	...	25	17	8	...	25	67	135	...	192		
...	7	270	25	...	295	1,415	138	...	1,553	10,188	1,063	...	11,251		
...	32	100	130	...	290	3,406	1,832	...	5,238	18,034	8,021	...	26,055		Includes Dubari 1,035.
...	...	10	1	...	11	23	143	...	166	192	392	...	584		
...	32	170	131	...	301	3,429	1,975	...	5,404	18,226	8,413	...	26,639		
...	114	233	223	...	459	4,242	3,090	...	7,322	37,582	12,792	...	50,374		Includes Dubari 1,035.
...	...	4	87	...	91	40	130	...	170	1,250	752	...	2,011		
...	114	340	310	...	550	4,282	3,220	...	7,502	38,841	13,544	...	52,385		
...	16	19	2	...	21	1,980	668	...	2,648	10,541	1,335	...	11,876		Includes Dubari 1,035.
...	...	9	17	...	26	13	18	...	31	656	149	...	825		
...	16	23	19	...	47	1,993	650	...	2,679	11,217	1,484	...	12,701		

CROP RETURN.

Canals.	Year.	KHA													
		CLASS OF													
		Rice.				Jowari.				Bajri.				Cot.	
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Dadwāh— Government... Jāghir ...	1892-93... 1892-93...	9 39	545 39	554 39	8,108 1,789	1,264 338	9,310 2,128	7,552 1,759	838 292	8,390 2,051	44 21	3 1			
Total ...	...	9	575	584	9,805	1,543	11,438	9,311	1,130	10,441	65	4			
Renwāh— Government... Jāghir ...	1892-93... 1892-93...	38 ...	...	38 ...	687 ...	103 ...	790 ...	11,724 30	567 ...	12,291 30	314 1	17 ...			
Total ...	...	38	...	38	687	103	790	11,724	567	12,231	315	17			
Alibhīr— Government... Jāghir ...	1892-93... 1892-93...	...	...	...	343 7	11 ...	354 7	7,236 1,276	82 ...	7,308 1,276	385 41	2 ...			
Total ...	...	...	...	...	350	11	361	8,502	82	8,584	406	2			
Great Marak— Government... Jāghir ...	1892-93... 1892-93...	29 29	...	29 29	1,774 303	174 4	1,948 307	27,919 5,069	4,690 242	32,618 5,251	7,567 910	1,107 37			
Total ...	...	49	...	49	2,077	178	2,255	32,928	4,931	37,869	8,477	1,154			
Ghāro Mahmutda— Government... Jāghir ...	1892-93... 1892-93...	338 ...	...	338 ...	2,219 488	228 31	2,447 519	25,518 10,399	4,195 302	30,633 10,601	9,485 1,194	728 34			
Total ...	...	338	...	338	2,707	259	2,966	45,817	4,437	50,254	10,569	762			
Kari Shumālī— Government... Jāghir ...	1892-93... 1892-93...	...	...	...	1,806 156	11 ...	1,277 156	20,117 5,591	374 ...	20,491 5,591	2,509 1,276	50 ...			
Total ...	...	...	...	...	1,432	11	1,433	25,708	374	26,082	3,185	50			
Nasir— Government... Jāghir ...	1892-93... 1892-93...	6 ...	...	6 ...	935 35	31 ...	986 35	18,879 1,084	614 ...	19,493 1,084	2,985 181	140 ...			
Total ...	...	6	...	6	990	31	1,021	19,903	614	20,517	3,172	140			
Sarfrāz— Government... Jāghir ...	1892-93... 1892-93...	63 ...	...	63 ...	826 136	30 2	856 138	18,310 3,124	564 41	18,874 3,165	1,931 728	85 12			
Total ...	...	63	...	63	962	32	994	21,424	605	22,029	2,450	97			
Other Canals— Government... Jāghir ...	1892-93... 1892-93...	13 3	...	13 3	7,309 541	933 25	8,242 566	10,906 200	1,137 3	11,943 508	62 11	10 ...			
Total ...	...	16	...	16	7,850	938	8,808	11,306	1,145	12,451	93	10			
Total, Hyderabad Canal District	...	38	1,428	1,466	65,604	14,128	79,732	2,05,84	15,663	221,787	29,766	2,338			
Canals North of Kotri— Government... Jāghir ...	1892-93... 1892-93...	991 ...	...	991 ...	2,029 60	84 123	2,104 183	2,385 53	35 262	2,430 317	36 2	1 2			
Total ...	...	991	...	991	2,030	207	2,237	2,430	297	2,727	36	3			
Kalri— Government... Jāghir ...	1892-93... 1892-93...	4,945 181	...	4,845 181	213 ...	6 ...	219 ...	4,191 54	183 ...	4,874 54	...	...			
Total ...	...	5,026	...	5,026	213	6	219	4,245	183	4,428	...	...			
Euphar— Government... Jāghir ...	1892-93... 1892-93...	3 424	9,968 424	9,971 424	5 ...	5 ...	10 ...	7,977 684	287 33	8,164 717	...	...			
Total ...	...	3	10,392	10,395	5	5	10	8,561	320	8,881	...	...			
Uchhā— Government... Jāghir ...	1892-93... 1892-93...	14 185	6,820 185	6,844 185	...	...	...	438 ...	160 3	598 3	...	...			
Total ...	...	14	7,016	7,030	...	...	...	438	163	601	...	...			
Canals in Tatta— Government... Jāghir ...	1892-93... 1892-93...	4,043 378	...	4,043 400	7 8	8 ...	15 8	581 175	89 ...	670 185	...	...			
Total ...	...	22	4,421	4,443	15	8	23	756	89	845	...	...			
Bhal Canals— Government... Jāghir ...	1892-93... 1892-93...	1,981 ...	...	1,981 ...	...	15 ...	15 ...	18 ...	36 ...	54 ...	...	...			
Total ...	...	1,981	...	1,981	...	15	15	18	36	54	...	...			

RIF.

Crops.

Loc.	Spill except from Government Canals.	Total.	Bibul plantation.				Other Crops.				Total Kharif.			
			Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.
Acres.			Area in Acres.				Area in Acres.				Area in Acres.			
...	47	...	...	...	...	...	5,387	2,547	...	7,914	21,078	5,137	...	26,215
...	23	...	...	...	...	...	530	559	...	1,089	4,080	1,221	...	5,320
...	69	...	...	...	...	...	5,397	3,106	...	9,003	25,177	6,358	...	31,535
...	331	...	...	...	...	...	3,028	93	...	2,120	14,753	817	...	15,570
...	1	...	...	...	...	...	6	...	...	6	27	...	...	37
...	232	...	...	...	...	...	3,034	92	...	2,129	14,790	817	...	15,607
...	367	...	...	...	...	...	775	9	...	794	8,790	104	...	8,893
...	41	...	...	...	...	...	134	...	...	134	1,458	...	...	1,458
...	408	...	...	...	...	...	909	9	...	918	10,167	104	...	10,271
...	8,674	...	...	...	...	...	3,742	45	...	4,306	41,078	6,464	...	47,466
...	967	...	...	...	...	...	589	364	...	924	6,811	337	...	7,163
...	9,631	...	...	...	...	...	4,331	499	...	4,830	47,613	6,821	...	54,634
...	10,189	...	...	...	...	...	3,168	178	...	3,346	50,370	5,607	...	55,977
...	1,138	...	...	...	...	...	1,730	52	...	1,782	18,021	419	...	18,440
...	11,331	...	...	...	...	...	4,898	230	...	5,128	63,991	6,026	...	70,017
...	2,559	...	...	...	...	...	1,822	26	...	1,833	25,719	461	...	26,180
...	1,276	...	...	...	...	...	587	...	...	587	7,416	...	...	7,610
...	3,835	...	...	...	...	...	2,414	26	...	2,440	33,329	461	...	33,790
...	3,125	...	...	...	...	...	1,555	33	...	1,588	24,374	824	...	25,198
...	187	...	...	...	...	...	96	...	...	1,402	...	...	...	1,402
...	3,312	...	...	...	...	...	1,651	33	...	1,684	25,776	824	...	26,600
...	2,016	...	1	5	...	6	1,608	28	...	1,656	22,676	775	...	23,451
...	540	...	...	...	...	...	205	1	...	206	3,493	56	...	4,049
...	2,536	...	1	5	...	6	1,813	29	...	1,842	26,609	831	...	27,509
...	92	...	...	...	...	...	1,514	469	...	1,993	19,711	2,562	...	22,272
...	11	...	...	...	...	...	105	1	...	106	1,137	37	...	1,194
...	103	...	...	...	...	...	1,619	470	...	2,089	20,688	2,699	...	23,467
...	32,994	...	331	5	...	636	34,080	9,464	...	43,544	3,35,833	43,336	...	3,79,259
...	37	...	...	...	...	...	143	4	...	147	4,594	1,115	...	5,709
...	2	...	...	...	...	...	1	96	...	97	116	483	...	599
...	39	...	...	...	...	...	144	100	...	244	4,710	1,698	...	6,398
...	...	...	...	...	...	...	768	101	...	869	5,172	6,135	...	10,307
...	...	...	...	...	...	...	49	15	...	64	108	199	...	279
...	...	...	...	...	...	...	817	118	...	933	5,276	5,331	...	10,606
...	...	...	...	...	...	...	1,546	69	...	1,615	8,431	10,329	...	19,760
...	...	...	...	...	...	...	152	47	...	199	836	564	...	1,340
...	...	...	...	...	...	...	1,698	116	...	1,814	10,367	10,333	...	21,100
...	...	...	...	...	...	...	235	232	...	467	667	7,232	...	7,900
...	...	...	...	...	...	...	...	3	...	3	...	192	...	192
...	...	...	...	...	...	...	235	235	...	470	697	7,414	...	8,101
...	...	...	...	...	...	...	37	21	...	58	625	4,161	...	4,786
...	...	...	...	...	...	...	...	...	...	...	205	378	...	583
...	...	...	...	...	...	...	37	21	...	58	836	4,539	...	5,399
...	...	...	...	...	...	...	...	2	...	2	18	2,034	...	2,052
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	2	...	2	18	2,004	...	2,052

Wheat.				Barley.				Oil-seeds.				Babul	
Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
488	1,433	...	1,921	56	248	...	304	836	1,779	...	2,605	6	21
...	148	...	148	...	...	...	...	8	272	...	281	...	...
488	1,581	...	2,069	56	248	...	304	835	2,051	...	2,886	6	21
71	520	...	591	...	20	...	20	400	3,839	...	4,319	...	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...
71	520	...	591	...	20	...	20	400	3,839	...	4,319	...	8
16	180	...	196	...	...	...	...	91	408	...	499	...	29
...	...	...	...	...	...	...	...	3	...	...	3	...	...
16	180	...	196	...	...	...	...	54	408	...	502	...	29
188	253	...	441	...	...	...	...	661	3,041	...	3,702	...	399
2	4	...	6	...	...	...	...	7	24	...	31	...	...
190	257	...	447	...	...	...	...	668	3,066	...	3,733	...	290
178	1,122	...	1,300	1	...	...	1	198	1,998	...	2,196	29	1,873
38	...	...	63	...	...	...	...	39	...	...	41	...	...
241	1,122	...	1,363	1	...	...	1	237	2,000	...	2,237	29	1,873
546	329	...	875	...	...	...	...	160	196	...	356	...	...
...	1	...	1	...	...	...	...	1	...	...	1	...	...
546	330	...	876	...	...	...	...	161	196	...	357	...	...
105	134	...	239	2	...	...	2	232	351	...	583	33	465
...	1	...	1	...	...	...	...	9	...	...	9	...	...
105	135	...	240	2	...	...	2	241	351	...	592	33	465
18	837	...	855	...	1	...	1	60	467	...	527	22	208
17	180	...	306	...	...	...	...	3	121	...	124	...	...
35	1,028	...	1,064	...	1	...	1	63	588	...	651	22	208
2,777	3,903	...	5,790	70	125	...	195	1,157	2,396	...	3,553	7	180
35	172	...	210	6	12	...	18	5	68	...	73	...	...
2,815	3,175	...	5,990	70	137	...	213	1,162	2,464	...	3,626	7	180
12,803	12,999	...	24,802	260	471	...	737	6,475	16,339	...	22,814	97	3,396
75	1,320	...	1,395	1	...	...	1	339	897	...	1,236	...	39
...	300	...	300	...	...	...	...	18	297	...	315	...	...
75	1,620	...	1,695	1	...	...	1	337	1,194	...	1,531	...	39
...	4	...	4	38	523	...	561	12	658	...	640	...	...
...	...	...	...	...	39	...	...	...	79	...	79	...	...
...	4	...	4	38	562	...	600	12	707	...	719	...	...
...	...	...	...	60	1,611	...	1,671	71	1,938	...	2,009	...	...
...	...	...	...	...	381	...	351	...	288	...	263	...	...
...	...	...	...	60	1,902	...	2,002	71	2,226	...	2,297	...	...
...	...	...	...	25	357	...	412	2	145	...	147	...	...
...	...	...	...	...	7	...	7	...	...	...	...	...	...
...	...	...	...	25	394	...	419	2	147	...	149	...	...
7	152	...	159	28	831	...	859	...	783	...	783	...	...
...	...	...	...	...	188	...	188	...	4	...	4	...	...
7	152	...	159	28	1,019	...	1,047	...	787	...	787	...	...
...	451	...	451	...	6	...	6	...	218	...	218	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	451	...	451	...	6	...	6	...	218	...	218	...	...

1892-93—continued.

CROPS.										TOTAL CULTIVATION.				REMARKS.
plantation.		Other Crops.				Total Rabi.								
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	
Acres.		Area in Acres.				Area in Acres.				Area in Acres.				
...	27	40	246	...	286	1,416	3,727	...	5,143	22,494	8,861	...	31,358	Includes Dubari 711.
...	...	24	147	...	171	33	567	...	606	4,132	1,788	...	5,920	
...	27	64	398	...	457	1,449	4,294	...	5,743	26,626	10,652	...	37,278	Includes Dubari 478.
...	8	13	78	...	91	514	4,515	...	5,029	15,267	5,332	...	20,599	
...	...	...	...	...	...	...	...	...	...	37	...	...	27	
...	8	13	78	...	91	514	4,515	...	5,029	15,394	5,332	...	20,636	Includes Dubari cultivation 57.
...	20	1	...	...	1	108	617	...	725	8,817	721	...	9,538	
...	...	10	...	...	10	13	...	...	13	1,471	...	...	1,471	
...	29	11	...	...	11	121	617	...	738	10,288	721	...	11,009	Includes Dubari cultivation 441.
...	290	12	32	...	44	861	3,616	...	4,477	41,863	10,080	...	51,943	
...	...	8	71	...	79	15	99	...	116	6,828	456	...	7,284	
...	290	20	103	...	123	578	3,715	...	4,593	49,091	10,536	...	59,227	Includes Dubari 715.
...	1,902	244	547	...	791	650	5,540	...	6,190	51,020	11,147	...	62,167	
...	...	192	83	...	275	294	85	...	379	12,915	504	...	14,419	
...	1,902	436	630	...	1,466	914	5,023	...	6,569	64,935	11,651	...	76,586	Includes Dubari 68.
...	153	100	213	...	313	806	891	...	1,697	26,525	1,323	...	27,877	
...	...	27	1	...	28	28	3	...	30	7,633	2	...	7,610	
...	153	127	214	...	341	834	893	...	1,727	34,163	1,354	...	35,517	Includes Dubari 400.
...	498	183	926	...	1,109	555	1,870	...	2,431	21,929	2,700	...	27,629	
...	...	23	5	...	27	28	6	...	37	1,433	6	...	1,439	
...	494	205	931	...	1,136	596	1,882	...	2,468	26,302	2,706	...	29,068	Includes Dubari 177.
...	236	121	292	...	418	221	1,804	...	2,025	22,897	2,579	...	25,476	
...	...	64	27	...	91	84	338	...	422	4,977	594	...	4,471	
...	230	185	319	...	504	305	2,142	...	2,447	26,974	2,973	...	29,947	Includes Dubari 1,387.
...	187	150	862	...	1,012	4,161	6,566	...	10,727	23,872	9,128	...	33,000	
...	...	3	85	...	88	52	337	...	389	1,200	374	...	1,583	
...	187	153	947	...	1,100	4,213	6,903	...	11,116	25,081	9,502	...	34,583	Includes Dubari 4,423.
...	3,193	1,922	4,100	...	6,022	20,963	36,605	...	57,568	356,396	70,931	...	436,327	
...	39	336	193	...	519	741	2,149	...	3,190	5,535	3,564	...	8,899	Includes Dubari 863.
...	...	4	163	...	167	22	760	...	792	138	1,243	...	1,381	
...	39	330	356	...	686	763	3,209	...	3,974	5,473	4,917	...	10,280	Includes Dubari 1,305.
...	...	117	1,250	...	1,367	167	2,405	...	2,572	5,339	7,549	...	12,879	
...	...	...	51	...	51	...	169	...	160	103	365	...	468	
...	...	117	1,301	...	1,418	167	2,574	...	2,741	5,412	7,905	...	13,317	Includes Dubari 3,216.
...	...	68	3,927	...	3,995	199	7,476	...	7,675	9,030	17,505	...	27,435	
...	...	2	78	...	80	2	747	...	749	838	1,251	...	2,089	
...	...	70	1,913	...	4,075	201	8,223	...	8,421	10,468	19,026	...	29,494	Includes Dubari 1,717.
...	...	316	2,572	...	2,683	143	3,104	...	3,247	820	10,336	...	11,156	
...	...	20	14	...	34	20	23	...	43	20	215	...	235	
...	...	136	2,586	...	2,722	163	3,127	...	3,290	850	10,341	...	11,391	Includes Dubari 1,069.
...	...	11	859	...	870	46	2,625	...	2,671	671	6,784	...	7,455	
...	...	...	64	...	64	...	256	...	256	205	634	...	839	
...	...	11	923	...	934	46	2,431	...	2,927	876	7,420	...	8,296	Includes Dubari 245.
...	...	...	123	...	128	...	833	...	833	18	2,867	...	2,885	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Includes Dubari 245.
...	...	...	128	...	128	...	833	...	833	18	2,867	...	2,885	

CROP RETURN,

		KHARIF.															
		CLASS OF															
Canals.	Year.	Rice.				Jowári.				Bājri.				Cot			
		Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.		
		Area in Acres.				Area in Acres.				Area in Acres.				Area in			
Pinyari—																	
Government...	1892-93...	1	60,245	...	60,246	18	12	...	30	3,694	44	...	3,188	4	...		
Jāghir ...	1894-95...	...	1,274	...	1,274	...	...	...	...	88	50	...	188	...	...		
Total ...	...	1	61,519	...	61,520	18	12	...	30	3,182	94	...	3,276	4	...		
Canals in Mirpur-Baturo—																	
Government...	1892-93...	1	7,682	...	7,683	46	10	...	56	2,917	354	...	3,271	8	...		
Jāghir ...	1894-95...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Total ...	...	1	7,682	...	7,683	46	10	...	56	2,917	354	...	3,271	8	...		
Canals in Sujāwal—																	
Government...	1892-93...	...	5,177	...	5,177	...	...	...	...	660	53	...	1,033	...	...		
Jāghir ...	1892-93...	...	149	...	149	...	...	...	...	18	14	...	32	...	...		
Total ...	...	...	5,326	...	5,326	...	...	...	...	968	67	...	1,065	...	...		
Sata—																	
Government...	1892-93...	1	4,651	...	4,652	17	3	...	20	2,899	34	...	2,933	...	...		
Jāghir ...	1892-93...	...	120	...	120	...	...	...	...	...	...	...	...	...	...		
Total ...	...	1	4,771	...	4,772	17	3	...	20	2,899	34	...	2,933	...	...		
Canals in Jati—																	
Government...	1892-93...	...	803	...	803	...	...	...	...	846	...	...	846	...	...		
Jāghir ...	1892-93...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Total ...	...	...	803	...	803	...	...	...	...	846	...	...	846	...	...		
Khanta—																	
Government...	1892-93...	...	3,899	...	3,899	...	...	...	...	87	65	...	152	...	...		
Jāghir ...	1892-93...	...	123	...	123	...	...	...	...	...	...	...	...	...	...		
Total ...	...	...	4,113	...	4,113	...	...	...	...	87	65	...	152	...	...		
Kokawāri—																	
Government...	1892-93...	7	9,457	...	9,464	1	...	...	1	93	91	...	188	...	...		
Jāghir ...	1892-93...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Total ...	...	7	9,457	...	9,464	1	...	...	1	93	91	...	188	...	...		
Canals in Sudhbandar—																	
Government...	1892-93...	...	1,304	...	1,304	4	2	...	6	243	16	...	259	...	...		
Jāghir ...	1892-93...	...	227	...	227	...	...	...	...	...	...	...	...	...	...		
Total ...	...	...	1,531	...	1,531	4	2	...	6	243	16	...	259	...	...		
Bunds, Left Bank—																	
Government...	1892-93...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Jāghir ...	1892-93...	...	272	...	272	...	...	...	...	...	...	...	...	...	...		
Total ...	...	...	272	...	272	...	...	...	...	...	...	...	...	...	...		
Bunds, Right Bank—																	
Government...	1892-93...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Jāghir ...	1892-93...	...	421	...	421	...	...	...	...	...	...	...	...	...	...		
Total ...	...	...	421	...	421	...	...	...	...	...	...	...	...	...	...		
Total, Karachi Canals District	...	49	125,752	...	125,901	2,390	268	...	2,667	27,735	1,809	...	29,544	48	...	3	
Sind { Government ...	1892-93...	76	392,380	...	392,456	165,698	261,405	...	431,103	317,372	109,661	...	427,063	47,116	6,531		
Foreign ...	1892-93...	...	517	...	517	10,400	30,864	...	41,264	50	4,962	...	5,032	11	86		
Jāghir ...	1892-93...	63	38,000	...	38,063	9,968	18,162	...	28,150	47,741	5,279	...	53,020	6,236	467		
Total, Sind ...	...	129	690,897	...	691,026	186,066	310,421	...	500,517	365,163	119,952	...	485,115	53,663	9,104		
Begri Canals District...	...	...	8,833	...	8,833	23,668	126,510	...	155,179	2,543	39,328	...	41,971	18	471		
Shikarpur Canals District	...	2	29,425	...	29,427	30,688	51,177	...	81,865	1,240	3,332	...	4,572	286	785		
Ghar do. do.	...	1	153,961	...	153,962	13,469	62,003	...	75,532	566	3,413	...	3,979	29	149		
Western Nara do.	...	...	61,056	...	61,056	44,314	53,378	...	97,692	4,938	4,705	...	9,723	117	98		
Eastern Nara do.	...	...	94,229	...	94,229	1,721	532	...	2,243	29,460	35,971	...	63,431	10,922	3,413		
Hyderabad Canals do.	...	38	1,498	...	1,466	63,604	14,128	...	79,732	205,824	15,961	...	221,767	22,756	2,338		
Fuleli do. do.	...	59	156,418	...	156,462	3,232	2,485	...	5,667	92,857	17,371	...	110,268	12,494	1,847		
Karachi do. do.	...	49	125,752	...	125,801	2,399	268	...	2,667	27,735	1,809	...	29,544	48	3		
Total ...	...	129	690,897	...	691,026	186,066	310,421	...	500,517	365,163	119,952	...	485,115	53,663	9,104		

CROPS.

ton.		Bâbul plantation.				Other Crops.				Total Kharif.			
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.
Acres.		Area in Acres.				Area in Acres.				Area in Acres.			
...	4	...	...	...	...	810	120	...	900	3,957	60,421	...	64,378
...	...	...	...	...	...	29	...	...	29	117	1,321	...	1,441
...	4	...	...	...	...	869	120	...	9-9	4,074	61,745	...	65,819
...	8	...	...	...	...	475	151	...	626	3,447	8,197	...	11,644
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	8	...	...	...	...	475	151	...	626	3,447	8,197	...	11,644
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	25	3	...	25	1,005	5,230	...	6,235
...	...	...	...	...	...	...	...	...	3	18	106	...	124
...	...	...	...	...	...	25	3	...	26	1,023	5,306	...	6,329
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	361	181	...	542	3,278	4,860	...	8,147
...	...	...	...	...	...	...	28	...	28	...	148	...	176
...	...	...	...	...	...	361	209	...	570	3,278	5,017	...	8,295
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	22	...	...	22	868	803	...	1,671
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	22	...	...	22	868	803	...	1,671
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	35	313	...	378	122	4,398	...	4,520
...	...	...	...	...	...	...	...	...	...	...	123	...	123
...	...	...	...	...	...	35	313	...	378	122	4,321	...	4,443
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	58	134	...	192	161	9,712	...	9,873
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	58	134	...	192	161	9,712	...	9,873
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	11	21	...	32	258	1,343	...	1,601
...	...	...	...	...	...	...	13	...	13	...	240	...	253
...	...	...	...	...	...	11	34	...	45	258	1,583	...	1,641
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	272	...	272
...	...	...	...	...	...	...	...	...	...	...	272	...	272
...	...	...	...	...	...	...	...	...	...	...	421	...	421
...	...	...	...	...	...	...	...	...	...	...	421	...	421
...	51	...	...	...	...	4,787	1,584	...	6,371	35,918	129,416	...	161,434
...	55,847	981	1,304	...	2,285	50,181	75,350	...	125,541	535,434	1,048,656	...	1,684,082
...	97	...	...	...	...	556	6,250	...	7,100	12,311	41,699	...	54,010
...	7,023	...	...	...	...	6,378	3,167	...	9,545	70,706	65,058	...	135,794
...	62,767	981	1,304	...	2,285	57,419	84,767	...	142,186	568,451	1,155,445	...	1,823,896
...	480	...	5	...	5	2,328	46,340	...	48,668	31,358	229,487	...	257,045
...	1,074	...	116	...	116	605	4,222	...	5,027	33,024	88,797	...	121,821
...	178	2	171	...	173	2,758	11,310	...	14,068	16,825	231,097	...	247,022
...	215	18	149	...	167	850	2,460	...	3,310	50,217	121,923	...	172,133
...	14,335	...	...	...	...	3,501	7,344	...	10,745	45,604	139,379	...	154,923
...	32,604	331	5	...	636	34,080	0,464	...	43,544	235,903	43,320	...	379,229
...	14,331	331	854	...	1,188	8,310	2,093	...	10,403	117,232	181,017	...	298,249
...	51	...	...	...	...	4,787	1,584	...	6,371	35,018	129,416	...	164,444
...	62,767	981	1,304	...	2,285	57,419	84,767	...	142,186	568,451	1,155,445	...	1,823,896

RABT.

CLASS OF

Wheat.				Barley.				Oil-seeds.				Rabul	
*Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.
Area in Acres.				Area in Acres.				Area in Acres.				Area in	
...	41	...	41	10	2,187	...	2,187	...	4,229	...	4,229	...	459
...	...	...	...	...	47	...	47	...	...	...	...	...	...
...	41	...	41	16	2,184	...	2,184	...	4,257	...	4,257	...	459
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	80	...	80	...	345	...	345	...	1,532	...	1,532	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	80	...	80	...	345	...	345	...	1,532	...	1,532	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	25	...	25	...	2,275	...	2,275	...	1,107	...	1,107	...	...
...	...	...	...	...	...	...	...	...	42	...	42	...	...
...	25	...	25	...	2,275	...	2,275	...	1,149	...	1,149	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	116	599	...	715	91	340	...	431	...	144
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	116	599	...	715	81	340	...	431	...	144
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	1,873	...	1,873	...	686	...	686	...	...
...	...	...	...	...	11	...	11	...	...	...	...	...	...
...	...	...	...	...	1,884	...	1,884	...	686	...	686	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	40	...	40	6	230	...	295	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	40	...	40	6	290	...	295	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	9	89	...	98	22	53	...	75	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	9	89	...	98	22	53	...	75	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	12	...	12	...	193	...	193	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	12	...	12	...	193	...	193	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	6	...	6	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	6	...	6	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	6	...	6	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	6	...	6	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
83	2,382	...	2,464	293	11,407	...	11,700	561	13,814	...	14,375	...	653
47,435	254,534	...	301,969	1,348	20,487	...	21,835	17,563	158,173	...	175,736	215	11,079
...	215	...	215	...	...	...	...	...	...	...	...	...	...
1,453	10,701	...	12,154	266	1,324	...	1,490	587	12,696	...	13,213	...	7
48,888	265,459	...	314,338	1,614	21,711	...	23,325	18,169	170,799	...	188,949	215	11,096
23	11,702	...	11,725	18	114	...	127	2,648	34,943	...	36,891	...	5
861	68,601	...	69,463	8	220	...	228	30	3,483	...	3,513	...	40
4,662	61,665	...	66,327	33	213	...	253	660	25,341	...	26,007	...	80
21,672	68,396	...	84,068	827	4,751	...	5,608	5,127	39,669	...	44,328	...	3
5,941	26,697	...	32,638	98	117	...	215	2,041	15,389	...	17,421	...	22
12,203	12,290	...	24,592	266	471	...	737	6,475	16,839	...	22,314	97	3,366
441	18,905	...	19,949	44	4,918	...	4,467	602	23,100	...	23,702	116	6,888
62	2,384	...	2,446	203	11,407	...	11,700	561	13,814	...	14,375	...	653
48,888	265,459	...	314,338	1,614	21,711	...	23,325	18,169	170,799	...	188,949	215	11,096

1892-93—concluded.

CROPS.										TOTAL CULTIVATION.				REMARKS
plantation.		Other Crops.				Total Rabi.								
Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	Lift.	Flow.	Spill except from Government Canals.	Total.	
Acres.		Area in Acres.				Area in Acres.				Area in Acres.				
...	459	164	2,718	...	2,882	180	9,581	...	9,764	4,137	70,004	...	74,142	Includes Dubari 3,113.
...	...	...	17	...	17	...	92	...	92	117	1,416	...	1,533	
...	459	164	2,736	...	2,899	180	9,676	...	9,856	4,254	71,421	...	75,675	
...	6	6	429	...	435	6	2,401	...	2,407	3,453	10,598	...	14,051	Includes Dubari 463.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	6	6	429	...	435	6	2,401	...	2,407	3,453	10,598	...	14,051	
...	...	3	633	...	636	3	4,040	...	4,048	1,003	9,270	...	10,273	Includes Dubari 1,100
...	...	...	138	...	138	...	180	...	180	18	346	...	364	
...	...	3	771	...	774	3	4,220	...	4,223	1,026	5,616	...	10,642	
...	144	15	507	...	522	222	1,590	...	1,812	3,500	6,459	...	9,959	Includes Dubari 658.
...	...	...	1	...	1	...	1	...	1	...	149	...	149	
...	144	15	508	...	523	222	1,591	...	1,813	3,500	6,608	...	10,108	
...	...	1	100	...	101	1	2,659	...	2,660	869	3,463	...	4,331	Includes Dubari 562.
...	...	...	33	...	33	...	44	...	44	...	44	...	44	
...	...	1	133	...	134	1	2,703	...	2,704	869	3,506	...	4,375	
...	4	34	627	...	661	40	960	...	1,000	162	5,758	...	5,520	Includes Dubari 793.
...	...	...	...	...	...	...	...	...	...	...	123	...	123	
...	4	24	627	...	661	40	960	...	1,000	162	5,481	...	5,643	
...	...	40	1,301	...	1,341	71	1,443	...	1,514	232	11,135	...	11,367	Includes Dubari 697.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	40	1,301	...	1,341	71	1,443	...	1,514	232	11,156	...	11,387	
...	...	11	227	...	238	11	432	...	443	269	1,775	...	2,044	Includes Dubari 214.
...	...	...	...	...	...	...	...	...	...	...	240	...	240	
...	...	11	227	...	238	11	432	...	443	269	2,015	...	2,284	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	6	...	278	
...	...	...	...	...	...	...	...	...	...	...	6	...	278	
...	...	...	...	...	...	...	...	...	...	...	6	...	427	
...	...	...	...	...	...	...	...	...	...	...	6	...	427	
...	652	938	16,030	...	10,968	1,874	44,285	...	40,159	36,802	173,701	...	210,560	Exclusive of Forest cultivation 13 acres
...	11,294	7,132	78,850	...	86,032	73,743	623,123	...	5,96,896	659,177	1,571,781	...	2,290,958	Dubari 61,343
...	...	...	9,288	...	9,288	...	9,503	...	9,503	12,311	61,202	...	63,513	Unauthorized 1,827
...	7	1,040	3,885	...	4,925	3,446	28,443	...	31,789	74,652	93,791	...	167,535	Government as per Table III 2,167,538
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deduct—Forest cultivation in Kivachi District details of which not received... 177
...	11,301	8,222	92,023	...	100,245	77,089	561,069	...	638,168	745,540	1,716,514	...	2,462,054	2,167,742
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,290,744
...	5	84	19,474	...	19,558	2,762	65,538	...	68,306	37,326	266,025	...	323,351	
...	49	261	4,680	...	4,941	1,169	77,327	...	78,497	34,184	166,124	...	200,308	
...	80	61	7,551	...	7,612	5,424	94,655	...	100,279	22,249	325,955	...	348,201	
...	3	2,947	22,740	...	25,687	30,603	129,879	...	160,482	60,890	251,805	...	332,665	
...	22	413	12,227	...	12,640	11,493	54,353	...	65,846	57,097	183,732	...	250,829	
...	3,493	1,922	4,100	...	6,023	20,963	36,605	...	57,568	326,596	79,301	...	436,327	
...	7,906	1,706	5,221	...	6,317	2,804	58,227	...	61,031	120,036	239,244	...	359,280	
...	652	938	16,030	...	16,068	1,874	44,285	...	46,159	36,802	173,701	...	210,560	
...	11,301	8,222	92,023	...	100,245	77,089	561,069	...	638,168	745,540	1,716,514	...	2,462,054	

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

TABLE IX.

Rainfall in the Province of Sind for 1892-93.

Collectorate and District.			April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total, 1892-93.	Total, 1891-92.
			In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.	In. ct.
UPPER SIND.	Begari Canals.	Jacobabad	...	0 21	0 27	2 50	1 34	...	...	...	0 21	0 30	1 50	...	6 33	0 94
		Kashmore	...	...	0 12	3 04	0 30	...	...	...	0 25	0 32	1 43	...	5 46	1 81
		Thul	...	...	0 53	2 43	0 58	...	...	...	0 11	0 37	1 23	...	5 25	2 04
		Shahdadpur	...	...	...	3 05	3 18	...	...	...	0 14	0 31	3 12	...	9 80	1 17
SHIKARPUR COLLECTORATE.	Shikarpur Canals.	Ubauro	...	...	0 20	1 12	1 11	...	...	...	0 18	0 25	0 65	...	3 51	3 52
		Mirpur	...	...	0 31	1 54	1 03	...	...	...	0 29	0 26	0 95	0 22	4 60	1 32
		Ghocki	...	...	0 09	1 02	1 64	...	...	...	0 23	0 18	1 20	0 02	4 33	0 94
		Rohri	...	...	0 35	3 03	0 53	...	...	...	0 20	0 25	1 14	...	5 50	2 34
		Shikarpur	...	...	0 36	0 89	0 35	0 05	...	...	0 29	0 20	1 48	...	3 62	0 69
		Sukkur	...	...	0 25	3 24	1 19	...	...	...	0 25	0 20	1 12	...	6 23	1 02
		Garchi Yasin	...	0 12	0 90	0 97	0 45	...	...	...	0 18	0 12	1 22	...	3 96	1 06
		Rato-dero	...	...	0 30	1 20	1 32	...	...	...	0 16	0 26	1 45	...	4 69	0 42
	Ghar Canals.	Larkhana	...	...	...	1 47	5 35	...	...	...	0 20	0 16	1 11	...	8 29	1 00
		Kambar	...	...	...	1 30	4 85	...	...	...	0 12	0 22	1 15	...	7 64	1 72
		Bakrani	...	...	...	1 70	3 40	...	...	...	...	0 30	0 76	...	6 26	1 39
		Mohar	...	...	...	1 06	5 53	...	...	...	0 09	0 20	0 88	...	7 76	2 97
THAR AND PARKAR COLLECTORATE.	Eastern Nara Canals.	Warah	...	...	...	1 61	4 51	...	...	...	0 09	0 08	0 95	0 20	7 44	3 30
		Khairpur Nathsah	...	...	...	1 51	5 00	...	...	...	...	0 35	0 86	...	7 72	2 12
		Nagar	...	4 58	0 08	10 93	5 57	7 91	0 61	...	...	...	0 35	...	30 03	...
		Mitti	...	2 06	...	7 43	1 90	2 70	0 03	...	...	...	0 25	...	14 34	...
	Hyderabad Canals.	Unarkot	...	0 09	0 37	4 47	3 74	2 31	...	...	...	...	0 42	...	12 30	...
		Khripa	...	0 21	...	6 23	7 10	0 20	...	...	...	0 38	0 07	...	14 79	0 81
		Kandiaro	...	...	0 13	2 56	4 20	...	...	...	...	0 54	0 70	...	7 93	0 06
		Nasahro	...	...	...	1 57	7 38	...	...	...	...	0 45	0 93	...	10 33	0 34
		Tharu Shah	...	...	0 10	2 38	4 73	...	...	...	0 03	0 30	0 85	...	8 39	0 89
		Moro	...	...	0 10	2 55	9 62	...	...	...	0 03	0 57	1 01	0 04	13 91	2 03
		Sakrand	...	...	...	5 43	10 08	...	...	...	...	0 39	1 25	...	17 15	0 21
		Hala	...	...	0 32	6 17	8 64	...	0 02	...	...	0 28	1 58	...	17 52	0 08
HYDERABAD COLLECTORATE.	Fuleli Canals.	Shahdadpur	...	...	0 36	6 62	6 11	0 31	...	...	0 01	0 50	0 87	...	14 73	...
		Tando Adam	...	...	0 21	2 83	6 41	...	...	...	...	0 14	1 14	...	10 73	0 09
		Tando Alahyar	...	0 01	...	5 39	3 20	...	...	...	...	0 64	0 53	...	9 80	0 30
		Mirpur Khās	...	0 22	...	6 07	4 21	0 05	...	...	...	0 38	0 28	...	11 21	0 72
		Hyderabad	...	...	0 78	6 89	2 88	...	...	...	...	0 27	0 97	...	11 79	0 45
		Mohbat Dero	...	0 21	...	7 93	3 22	0 50	...	...	...	0 08	0 61	...	12 55	1 56
		Tando Bago	...	0 52	...	7 14	1 45	0 39	...	...	...	0 09	0 91	...	11 00	2 64
		Kāsin	...	0 42	...	10 41	1 31	0 15	...	...	...	...	0 56	...	12 85	4 02
	Karachi Canals.	Tando Muhammad Khan	...	0 05	0 01	6 60	2 06	...	...	...	...	0 17	0 97	...	11 86	0 65
		Dadu	...	...	...	0 88	11 50	...	...	...	0 03	0 85	1 18	0 02	14 46	0 98
		Johi	...	0 02	0 44	0 41	8 62	...	...	...	...	0 86	1 27	0 28	11 90	1 19
		Schwān	...	0 08	...	3 75	14 38	...	...	...	...	0 52	0 97	...	19 71	2 16
KARACHI COLLECTORATE.	Karachi Canals.	Manjband	...	0 02	0 23	6 18	9 25	...	...	...	...	0 67	1 50	...	17 85	0 64
		Kotri	...	...	0 31	8 40	3 31	...	...	...	...	0 28	1 12	...	13 42	0 17
		Bela Khān	...	...	...	8 05	5 78	...	...	...	...	0 33	2 00	...	16 16	0 74
		Tando	...	...	...	7 23	5 36	0 10	...	...	...	0 33	1 39	...	14 48	1 34
		Joruck	...	0 03	0 04	11 71	1 80	...	...	...	...	0 02	1 94	...	15 53	1 99
		Tāta	...	...	...	13 43	0 79	...	...	...	...	0 50	1 09	...	16 41	2 45
		Sāro	...	...	...	7 15	2 40	...	...	...	...	0 17	1 29	...	11 01	1 82
		Mirpur Batoro	...	...	...	13 79	0 80	...	...	...	...	0 14	1 31	...	16 14	1 08
	Karachi Canals.	Sujawal	...	0 10	...	15 96	0 38	...	...	...	...	0 49	1 03	...	18 12	2 61
		Shahbandar	...	...	0 07	4 75	0 34	...	0 03	...	...	0 16	0 81	...	6 16	0 71
		Kotri Ghorebāri	...	...	...	21 03	0 49	...	...	...	0 04	0 73	2 35	...	27 64	0 87
		Keti	...	...	...	13 10	1 07	0 04	...	...	...	0 20	1 09	...	15 91	1 77
	Karachi Canals.	Mughalbin	...	0 31	...	10 29	0 69	...	...	...	...	1 51	2 49	...	16 61	0 73
		Karechi	...	...	...	...	...	...	...	...	...	...	...	...	...	...

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

Memorandum showing the amount of Loss to Canals on account of difference between Assessments of Water-rates on Jāghir Lands, and Assessments at the ordinary rates in force for Government Lands.

	To end of 1891-92.	During 1892-93.	To end of 1892-93.	Remarks.
MAJOR WORKS.	Rs.	Rs.	Rs.	
<i>Productive Works.</i>				
Desert Canal	2,80,115	* 15,417	2,95,532	* On account of Kalat.
Begāri Canal	3,94,830	† 33,650	4,28,480	† Including Rs. 19,109 on account of Kalat.
Eastern Nāra Works	67,338	9,488	76,826	
Total ...	7,42,283	58,555	8,00,838	
MINOR WORKS AND NAVIGATION.				
<i>Works for which Capital and Revenue Accounts are kept.</i>				
Sukkur Canal	40,434	6,857	47,291	
Ghār Canal	2,31,672	33,099	2,64,771	
Mehrabwāh	2,998	572	3,570	
Alibhar Kacheri Canal	29,615	3,242	32,857	
Mārak Great Canal	1,59,836	17,932	1,77,768	
Sarfrāzwāh	82,511	9,194	91,705	
Fuleli Canal	13,63,331	1,39,997	15,03,328	
Total ...	19,10,397	2,10,893	21,21,290	
<i>Works for which only Revenue Accounts are kept.</i>				
Executive Engineer, Shikārpur Canals	...	33,591	...	
„ Western Nāra Canals	...	57,679	...	
„ Hyderabad do.	...	79,949	...	
„ Fuleli do.	...	1,192	...	
„ Karāchi do.	...	20,629	...	
Total ...	...	1,93,040	...	

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. I-A.

Statement of Canals in Sind.

1	MAJOR WORKS.										MINOR WORKS, CANALS AND REVENUE.									
	Begeti Canal.					Eastern Nara Canals.					Older Canals.					Hyderabad Canals.				
	Desert Canal.	Unha-wad.	Begeti Canal.	Total.	Nara Supply Channel.	Eastern Nara.	Mirzo Canal.	Bawal.	Hemawal.	Khiari Canal.	Thar Canal.	Total.	Sukkur Canal.	Older Canal.	Total.	Mehrab. Aikhar Kucheri.	Mehrab. Aikhar Kucheri.	Sarfaraz.	Total.	Futeli.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Source of supply of water.</i>																				
Minimum discharge of river ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maximum discharge of river ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Area irrigable by complete project ..	3,031	1,101	8,382	10,074	..	..	3,500	..	..	1,197	..	7,233	..	..	..	..	..	760	..	..
Do. at present ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Sanctioned estimate.</i>																				
First charges ..	12,14,790	5,66,891	16,25,609	34,07,290	..	..	..	..	..	..	..	1,34,49,618	13,67,731	4,45,778	18,13,300	66,683	28,020	1,98,364	1,16,751	12,55,889
Interest during construction ..	4,20,130	1,74,584	5,45,357	11,39,071	..	..	..	..	..	..	..	31,483	60,154	1,51,483	627	7,588	6,121	13,589	41,888	41,888
Total, Estimate ..	17,20,573	6,25,197	26,31,196	49,82,966	..	..	..	..	..	..	..	2,06,46,219	14,28,565	4,90,361	19,68,293	69,340	28,547	2,03,862	1,30,912	12,77,767
<i>Expenditure to end of 1892-93.</i>																				
First charges ..	12,23,980	5,23,005	16,25,609	34,07,290	..	..	..	..	..	..	..	1,34,49,618	13,67,731	4,45,778	18,13,300	66,683	28,020	1,98,364	1,16,751	12,55,889
Interest during construction ..	40,608	17,457	54,512	1,12,577	..	..	..	..	..	..	..	1,51,483	60,154	1,51,483	627	7,588	6,121	13,589	41,888	41,888
Total, Expenditure ..	12,64,588	5,40,462	16,80,121	35,85,171	..	..	..	..	..	..	..	1,36,011	14,27,885	4,97,261	19,74,427	74,271	35,608	2,11,953	1,30,340	13,07,777
<i>Works as now sanctioned.</i>																				
Main Canal Irrigation ..	75	36	26	137	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Distributaries ..	117	31	100	248	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Of above—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Navigable Canals ..	75	..	58	133	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Distributaries ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Works completed at end of 1892-93—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Main Canal Irrigation ..	75	36	26	137	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Distributaries ..	117	31	100	248	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Of above—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Navigable Canals ..	75	..	58	133	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

STATEMENT

Statement showing the Financial Results of Irrigation

Realizations under main heads of

REVENUE (ACTUAL RECEIPTS).																
Works.	Irrigation.												Revenue Management.			
	Direct.	Indirect.				Total.	Plantation.	Miscellaneous.	Total.	Less—Refunds of revenue.	Gross Revenue less Refunds.	Deduct—Share due to old Irrigation.	Total revenue due to Improvements.	Establishments.		
		Water-rates paid.	Share of Land Revenue.	Four per cent. on value of proceeds from sale of waste or other lands up to end of year.	Total.									Provision.	Executive.	Civil Officers.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
MAJOR WORKS.																
Productive Works.																
1	Desert Canal	28,410	98,838	956	99,594	1,28,004	...	312	1,28,316	42	1,28,274	...	1,28,274	...	...	12,035
2	Unharwah	...	46,096	1,366	47,362	47,362	...	3	47,365	3	47,362	...	47,362	...	...	4,609
3	Begdri Canal	28,610	3,74,276	4,079	3,78,355	4,06,965	...	1,000	4,07,965	5,537	4,02,428	33,613	3,68,815	...	...	38,903
4	Eastern Nara Works	2,086	4,63,512	87	4,63,699	4,65,885	2,192	15,973	4,63,830	43	4,63,907	3,444	4,59,363	...	7,143	47,229
Total, Major Works		59,106	9,82,522	6,388	9,88,910	10,48,016	2,192	17,288	10,67,306	5,625	10,61,681	37,067	10,24,614	...	7,143	1,02,796
MINOR WORKS AND NAVIGATION.																
5	Sukkur Canal	1,061	2,15,403	430	2,15,833	2,16,594	513	705	2,18,301	4,321	2,13,980	84,606	1,29,174	...	...	91,238
6	Ghar do.	3,438	2,30,661	2,378	2,33,042	2,36,480	1,573	4,740	2,42,792	34	2,42,758	1,35,512	6,97,246	...	...	73,701
7	Mehrabrah	1	20,544	264	20,908	20,809	...	80	20,889	1	20,888	26,879	—5,991	...	...	2,055
8	Allibar Kacheri Canal	462	19,906	207	20,113	20,375	46	...	20,615	21	20,594	17,505	3,069	...	...	2,034
9	Mistrak Great Canal	2,363	1,16,397	660	1,17,057	1,19,430	380	...	1,19,800	23	1,19,777	59,137	60,349	...	...	11,874
10	Surfrázah	1,403	42,361	479	42,840	44,243	293	18	44,585	40	44,509	18,908	25,703	...	...	4,372
11	Fuleli Canal	24,084	5,76,943	1,932	5,77,893	6,01,979	680	2,783	6,05,442	3,012	6,02,429	2,44,549	3,57,899	...	...	59,983
Total, Minor Works and Navigation		32,814	17,21,218	6,370	17,27,588	17,69,402	3,482	8,418	17,52,297	7,362	17,64,935	5,87,494	11,77,441	...	...	1,26,255
GRAND TOTAL		91,920	27,03,740	12,758	27,16,498	28,09,418	5,674	25,701	28,30,705	12,987	28,36,693	6,24,551	22,02,153	...	7,143	2,78,051

No. I-C.

Works in Sind for the year ending 31st March 1893.

Revenue and Working Expenses.

WORKING EXPENSES.																	NET REVENUE.	
Account.	Maintenance and Repairs.										Grand Total Working Expenses.	Deduct—Old Maintenance Charges.			Total Working Expenses on Improvements.	Total.	Due to Improvements.	
	Establishment.			Works.	Repairs.	Sundries.	Tools and Plant.	Flakidations.	Total Cost of Maintenance.	Indirect Charges.		Direct.	Indirect.	Total.				
	Direction.	Executive.	Total.															
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
12,044	2,881	48,926	21,837	22,333	32,314	...	145	73	92,092	3,361	1,007,441	...	...	...	3,07,441	20,633	20,633	
4,609	337	2,345	2,482	...	8,123	...	31	67	10,723	317	15,629	...	...	...	15,629	31,083	31,683	
38,902	1,316	8,418	9,661	...	30,983	...	176	366	40,811	1,506	87,938	6,731	2	8,739	10,558	3,21,318	2,36,564	
54,372	3,962	—3,886	—4,934	8,829	86,298	...	433	1,372	94,790	729	1,49,890	344	...	344	1,49,555	3,33,908	2,39,608	
1,00,939	8,426	23,623	32,049	34,382	1,67,740	...	806	1,378	2,38,354	6,006	3,54,329	9,104	2	9,700	3,48,236	7,07,542	6,78,546	
21,236	1,038	6,761	7,799	...	24,686	...	163	609	33,197	1,092	55,523	19,266	106	13,362	42,160	1,39,455	67,011	
73,501	3,044	19,931	22,975	2,162	71,410	...	250	518	97,375	3,238	1,74,314	36,680	161	16,841	1,55,473	5,08,956	4,51,373	
2,866	167	1,031	1,198	...	3,584	...	—3	...	1,769	145	6,919	7,055	438	7,166	—207	33,909	—5,786	
2,404	189	978	1,115	...	3,391	...	—4	...	4,502	457	6,603	9,078	189	9,266	—2,572	12,801	5,662	
11,874	1,592	9,386	10,778	7,847	26,005	...	—33	...	44,597	1,509	57,060	21,978	437	23,405	34,575	61,797	25,705	
4,372	530	3,763	5,235	454	12,422	...	—13	...	17,098	593	22,063	7,631	170	7,821	14,242	22,146	11,461	
59,983	6,663	30,207	36,870	13,330	1,56,685	...	318	11	1,99,234	4,163	2,64,379	1,14,258	2,096	1,16,361	1,48,088	3,36,608	2,08,862	
1,76,256	12,953	71,997	84,950	31,913	2,91,333	...	677	989	4,00,262	11,018	5,51,931	1,93,966	3,276	7,96,212	5,91,091	11,27,602	7,65,700	
2,85,191	31,379	96,626	1,26,999	58,185	4,00,073	...	1,482	2,367	4,39,116	47,361	4,83,266	2,92,047	3,378	2,00,348	7,26,977	18,84,544	14,65,834	

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. II-C.

Statement showing the Financial Results of Irrigation Works in Sind for the year 1892-93, based on Actual Receipts.

Irrigation Works.	Direct and Indirect Capital Outlay to end of 1892-93.	REVENUE RECEIPTS.				WORKING EXPENSES.				Net Revenue due to Improvements.	Percentage of net revenue on Capital Outlay to end of year.	Simple Interest on Capital.	SURPLUS REVENUE AFTER PAYING INTEREST.		EXCESS CHARGES, INCLUDING INTEREST.
		Gross receipts, Direct and Indirect from all sources.	Deduct—Share due to Irrigation Works.	Total Revenue due to Improvements.	Total Charges, Direct and Indirect.	Deduct—Old maintenance charges.	Total Working Expenses on Improvements.	Amount.	Percentage on total sum at charge.				Amount.	Percentage on total sum at charge.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
MAJOR WORKS.															
Productive Works.															
1	19,64,018	1,28,274	...	1,28,274	1,07,441	...	1,07,441	20,833	1-65	48,885	...	...	...	...	5-29
2	2,59,452	47,362	...	47,362	35,679	...	35,679	11,683	8-81	13,669	18,014	...	...	...	...
3	16,73,079	4,27,425	33,613	3,93,812	31,310	8,759	72,551	2,96,264	17-71	65,024	2,31,240	103-43	...	...	...
4	55,92,117	4,83,807	3,444	4,80,353	1,49,599	344	1,49,555	3,30,808	5-92	2,12,244	1,18,564	1-98	...	...	...
Total, Major Works															
...															
MINOR WORKS AND NAVIGATION.															
5	13,88,713	2,13,980	84,806	1,29,104	55,525	13,362	42,163	97,011	6-27	53,150	23,861	1-60	...	...	...
6	4,40,977	7,42,758	1,35,512	6,07,246	1,74,314	18,841	1,55,473	4,51,773	102-45	16,921	4,35,152	*	...	...	...
7	72,040	20,988	28,879	-5,891	6,979	7,186	-207	5,784	8-03	2,641	...	...	8,425	...	35-43
8	23,917	20,584	17,505	3,089	6,693	9,266	-2,573	5,692	23-67	928	4,734	13-10	...	...	...
9	2,01,533	1,19,777	59,437	60,340	57,980	23,405	34,375	25,065	13-78	7,744	18,021	3-87	...	...	...
10	124,669	44,509	18,896	25,703	22,063	7,821	14,242	11,461	9-19	4,742	6,719	2-87	...	...	...
11	12,36,510	6,09,429	2,44,549	3,67,880	2,64,379	1,16,361	1,48,018	2,08,862	17-05	45,552	1,64,060	205-33	...	...	...
Total, Minor Works and Navigation															
...															
GRAND TOTAL															
...															

* The total sum at charge being minus, no percentage is shown.

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. III-C.

Demands and Realizations during the year 1892-93 in Sind.

Irrigation Works.	Balance of Demands un- realized at commencement of year.	Demands of year.	Total.	Deduct— Remissions including Cash refunds.	Net Total.	Deduct— Amount unrealized at close of year.	Actual total receipts of year.	Deduct—Share due to old irrigation.	Total Revenue due to Improve- ments.
1	2	3	4	5	6	7	8	9	10
MAJOR WORKS.									
Productive Works.									
1 Desert Canal	38,828	1,37,098	1,75,926	17,817	1,58,109	29,885	1,28,274	.....	1,28,274
2 Ucharwah	10,806	43,277	53,583	277	53,906	5,944	47,362	.....	47,362
3 Begari Canal	32,119	4,01,512	4,33,631	11,093	4,22,538	20,110	4,02,428	33,613	3,68,815
4 Eastern Nara Works	808	4,85,773	4,86,581	316	4,86,265	2,458	4,83,807	3,444	4,80,363
Total, Major Works*	82,061	10,67,660	11,49,721	29,503	11,20,218	58,347	10,61,871	37,057	10,24,814
MINOR WORKS AND NAVIGATION.									
5 Sukkur Canal	878	2,18,238	2,19,116	4,221	2,14,895	915	2,13,980	84,806	1,29,174
6 Ghár do.	284	7,43,338	7,43,622	34	7,43,588	830	7,42,758	1,35,512	6,07,246
7 Mehraabwah	318	20,889	21,207	1	21,206	318	20,888	26,879	—5,991
8 Alibhar Kacheri Canal... ..	— 4	20,820	20,616	21	20,595	1	20,594	17,505	3,089
9 Mank Groat do.	— 35	1,19,931	1,19,895	23	1,19,873	96	1,19,777	59,437	60,340
10 Sarfrazwah	* 320	44,689	45,019	49	44,970	461	44,509	18,806	25,703
11 Fuleli Canal	1,875	6,06,380	6,07,205	3,020	6,04,185	1,756	6,02,429	2,44,549	3,57,880
Total, Minor Works and Navigation...	3,646	17,73,935	17,76,681	7,369	17,69,312	4,377	17,64,935	5,87,494	11,77,441
Grand Total	85,707	28,40,695	29,26,402	36,872	28,89,530	62,724	28,26,806	6,24,551	22,02,255

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. IV-C.

Statement showing the Financial Results of Irrigation Works in Sind for the year ended 1892-93, based on the Assessment of the year.
Principal Results of Operations for the year ended 31st March 1893.

Irrigation Works.	Capital Outlay (Direct and Indirect) to end of year.	REVENUE ASSESSED DURING THE YEAR.										WORKING EXPENSES.				NET REVENUE OF THE YEAR.		Percentage on Capital Outlay to end of year (Improvements only).	
		Direct Revenue.			Indirect Revenue—Land Revenue due to operation of canal.			Loss—Refunds of Revenue.	Grand Total.	Deduct—Share due to old Irrigation.	Total Revenue due to Improvements.	Total charges, Direct and Indirect.	Deduct—Old maintenance charges.	Total Working expenses on Improvements.	Total.	Due to Improvements.			
		Occupier's rate.	Plantations.	Miscellaneous.	Total.	Share of Land Revenue.	4 per cent. on 1/16th of proceeds from sale of rights in waste or other lands up to end of year.										Total.		
																			Rs.
1 •	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
MAJOR WORKS.																			
Productive Works.																			
1	Desert Canal	42,64,048	36,396	...	312	37,138	99,004	956	99,860	42	1,37,056	...	1,37,056	1,07,441	...	1,07,441	39,612	2-34	
2	Unharwah...	3,69,462	...	...	...	...	42,068	1,368	43,374	3	43,374	...	43,374	15,679	...	15,679	27,506	7-68	
3	Begari Canal	16,73,079	20,584	...	1,000	20,684	3,66,549	4,079	3,69,578	4,537	3,69,578	33,613	3,62,382	81,310	8,789	22,561	2,14,964	17-32	
4	Eastern Nara Works	58,92,117	2,131	2,192	15,973	20,316	4,65,376	87	4,65,467	43	4,65,730	3,444	4,82,286	1,49,899	344	1,49,555	3,33,831	3-35	
Total Major Works		38,88,696	68,501	2,492	17,568	58,041	9,73,231	6,388	9,79,619	5,625	10,02,085	37,062	10,24,978	3,54,329	9,103	3,45,238	7,07,706	7-65	
MINOR WORKS AND NAVIGATION.																			
5	Sukkur Canal	13,88,713	1,170	...	295	2,477	2,15,231	480	2,15,701	4,224	2,44,017	84,908	1,29,218	55,226	33,362	42,463	4,58,492	6-27	
6	Ghar	4,40,377	3,337	1,572	4,740	10,149	7,30,811	2,373	7,33,189	34	7,43,304	1,36,642	4,07,792	74,314	18,944	3,65,473	5,88,060	102-57	
7	Mehrabwah	72,914-0	...	...	...	...	20,544	201	20,808	1	20,808	26,879	5,991	6,975	7,186	2,007	13,909	8-03	
8	Alibhar Kachari Canal	23,917	467	...	...	...	49,966	507	50,473	21	50,494	17,865	3,991	6,003	3,991	2,573	13,906	23-69	
9	Masak Great	2,01,553	2,494	280	...	2,874	4,15,397	460	4,15,857	23	4,15,903	58,437	60,471	57,890	23,406	34,578	25,986	12-85	
10	Sariravah	1,24,680	1,536	298	...	1,849	42,361	479	42,840	49	42,889	18,306	22,524	22,063	7,821	14,752	22,577	9-30	
11	Fulei Canal	12,30,910	24,529	680	2,783	27,792	5,75,586	1,953	5,77,538	3,013	6,02,317	2,44,549	3,57,763	2,94,379	1,16,361	1,45,018	3,57,338	17-65	
Total Minor Works and Navigation		34,82,390	33,531	3,482	8,418	45,729	17,20,936	6,370	17,27,306	7,362	17,65,073	5,87,409	11,78,129	5,87,333	1,96,243	3,91,691	14,72,240	22-38	
Grand Total		1,24,71,096	1,02,395	5,674	25,791	4,33,770	26,94,167	12,748	27,06,925	12,987	28,27,708	6,24,531	23,03,157	9,42,262	2,05,345	7,36,317	18,85,446	14,66,240	11-85

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT.

General Abstract of Financial Results of Irrigation

		WORKS IN										
		MAJOR WORKS—PRODUCTIVE WORKS.					MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL AND REVENUE					
		Desert Canal.	Unhar-wah.	Bezāri Canal.	Eastern Nara Works.	Total.	Sukkur Canal.	Ghār Canal.	Mehrabwāh.	Alibhar Kacheri Canal.	Mārak Great Canal.	Surfraz-wāh.
Capital Outlay.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
During year	Direct ...	2,497	19,770	...	1,90,545	2,02,802	.....	.....	.....	.....	.....	...
	Indirect...	70	554	...	5,917	5,641	.....	.....	4,171	.....	.....	...
Total ...		2,567	20,324	...	1,95,562	2,08,443	.....	.....	4,171	.....	.....	...
To end of year	Direct ...	12,23,389	3,51,605	16,25,009	53,96,371	85,96,263	13,28,747	4,15,537	66,018	23,207	1,39,600	1,18,550
	Indirect...	40,668	7,947	47,470	1,95,746	2,91,731	59,966	25,449	6,022	710	7,953	6,131
Total ...		12,64,048	3,59,452	16,73,079	55,92,117	88,88,006	13,88,713	4,40,977	72,040	23,917	2,01,553	1,24,680
Gross Revenue.												
During year	Direct ...	29,722	3	29,610	20,251	78,596	2,368	9,750	81	802	2,743	1,718
	Indirect...	99,552	47,359	3,39,303	4,60,112	9,46,228	1,26,893	5,97,496	-8,072	2,587	57,597	23,985
Total ...		1,28,274	47,362	3,68,913	4,80,363	10,24,814	1,29,174	6,07,246	-5,991	3,089	60,340	25,703
To end of year	Direct ...	3,56,683	196	4,06,141	6,40,001	14,05,021	24,424	2,30,877	1,480	12,970	60,354	39,132
	Indirect...	18,76,098	3,53,636	48,36,747	65,08,759	1,25,75,140	15,06,180	1,27,56,659	1,97,329	1,24,721	9,93,572	3,02,553
Total ...		22,32,691	3,53,832	52,44,888	71,48,760	1,40,80,161	15,30,604	1,29,87,536	1,98,419	1,37,691	10,53,926	3,41,684
Working Expenses.												
During year	Direct ...	1,04,977	15,332	79,367	1,49,826	3,39,192	41,177	1,52,398	-244	-2,543	33,493	13,819
	Indirect...	3,364	347	1,894	729	6,034	996	3,077	37	-31	1,083	453
Total ...		1,07,441	15,679	72,551	1,50,555	3,45,226	42,163	1,55,473	-207	-2,573	34,575	14,242
To end of year	Direct ...	7,97,561	1,31,686	22,25,154	29,97,599	61,41,940	9,95,542	39,51,799	1,29,643	1,26,411	4,19,740	2,78,416
	Indirect...	23,646	2,712	58,715	1,20,368	2,95,331	27,657	90,225	2,848	3,539	10,724	8,767
Total ...		8,21,107	1,34,398	22,83,869	31,17,967	63,47,271	10,23,199	40,42,024	1,32,491	1,29,950	4,30,464	2,87,183
Net Revenue.												
During year	...	20,833	31,693	2,96,264	3,30,808	6,79,588	87,011	4,51,773	-5,784	5,662	25,784	11,461
	To end of year	14,11,584	2,29,484	29,61,019	40,30,803	86,32,390	5,06,405	29,45,512	66,928	7,741	6,23,468	53,501
Simple Interest.												
During year	...	48,885	13,699	65,024	2,12,244	3,39,822	.....	.....	.....	.....	.....	...
	To end of year	7,05,400	1,05,240	12,80,265	48,09,896	64,00,801	.....	.....	.....	.....	.....	...
Net profit after paying off Interest.												
During year	...	-28,052	18,014	2,31,240	1,18,564	3,39,766	.....	.....	.....	.....	.....	...
	To end of year	7,06,184	1,24,244	16,80,764	-2,73,033	22,32,089	.....	.....	.....	.....	.....	...

Works in Sind for and up to close of 1892-93.

OPERATIONS.

THE ACCOUNTS ARE KEPT.		Grand Total.	MINOR WORKS AND NAVIGATION—WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.						Total.	Expenditure on, and Receipts from, Agricultural Works for which neither Capital nor Revenue Accounts are kept		
Fuleli Canal.	Total.		Under Executive Engineer, Shikarpur Canals.	Under Executive Engineer, Western Nara Canals.	Under Executive Engineer, Hyderabad Canals.	Under Executive Engineer, Fuleli Canals.	Under Executive Engineer, Karachi Canals.	Expenditure.		Receipts.		
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
81,545	81,545	2,84,347	...	...	...	...	...	...				
1,882	6,055	11,689	...	...	...	...	...	...				
83,427	87,603	2,96,036	...	...	...	...	...	...				
11,56,573	35,32,511	1,19,29,306	...	...	...	...	...	...				
43,937	1,50,149	4,41,580	...	...	...	...	...	...				
12,30,610	34,82,380	1,23,71,096	...	...	...	...	...	...				
24,718	41,880	1,20,466	9,048	21,400	16,206	489	9,080	56,285				
3,33,162	11,35,061	20,81,789	4,98,354	7,49,007	6,31,484	30,914	3,21,129	22,30,593				
3,57,880	11,77,441	32,02,235	5,07,002	7,70,467	6,37,692	31,303	3,50,970	22,77,373				
6,80,739	10,49,976	24,54,987	...	...	...	...	...	...				
70,40,471	2,39,21,094	3,74,96,234	...	...	...	...	...	...				
77,21,210	2,49,71,070	3,99,61,321	...	...	...	...	...	...				
1,44,962	3,83,651	7,22,245	1,28,003	3,02,790	2,25,961	33,382	2,55,392	9,52,183				
3,068	8,040	14,074	...	...	...	...	...	...				
1,48,018	3,91,691	7,26,917	1,28,003	3,02,790	2,28,961	68,382	2,56,392	9,61,128				
51,04,631	1,10,67,063	1,71,49,022	...	...	...	...	...	...				
1,46,998	2,90,758	4,46,089	...	...	...	...	...	...				
52,51,520	1,12,97,890	1,70,45,111	...	...	...	...	...	...				
2,09,862	7,35,710	14,65,335	3,78,929	4,67,617	4,08,731	—2,079	71,817	12,25,145				
24,69,681	1,36,73,520	2,33,06,120	...	...	...	...	...	...				

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

Statement showing actual Receipts for 1892-93 on account of Irrigation share of Land Revenue from Canals in Sind.

Works.	Gross Irrigation share of Land Revenue.	Deduct Irrigation share of cash refunds of Land Revenue in the Civil Department.	Total Irrigation share of Land Revenue accounted for in the Public Works Department.
	Rs.	Rs.	Rs.
MAJOR WORKS.			
<i>Productive Public Works.</i>			
Desert Canal	98,638	42	98,596
Unharwāh	46,096	3	46,093
Begāri Canals	3,74,276	5,537	3,68,739
<i>Eastern Nāra Works.</i>			
Mithrau Canal	2,49,977	31	2,49,946
Thar do.	89,809	.....	89,809
Nāra do.	65,587	3	65,584
Dim do.	13,227	5	13,222
Heranwāh	5,687	4	5,683
Nāra Supply Channel	28,226	.....	28,226
Khipra Canal	10,999	.....	10,999
Total, Eastern Nāra ...	4,63,512	43	4,63,469
Total, Major Works ...	9,82,522	5,625	9,76,897
MINOR WORKS AND NAVIGATION.			
<i>Works for which Capital and Revenue Accounts are kept.</i>			
Sukkur Canal	2,15,403	4,221	2,11,182
Ghār do.	7,30,664	34	7,30,630
Mehrabwāh	20,544	1	20,543
Alibhar Kacheri Canal	90,908	21	19,885
Mārak g̃eat do.	1,16,397	23	1,16,374
Sarfrāzwāh	42,361	49	42,312
Fuleli Canal	5,75,943	184	5,75,759
Total, Works for which Capital and Revenue Accounts are kept ...	17,21,218	4,533	17,16,685
<i>Works for which only Revenue Accounts are kept.</i>			
Shikārpur Canals	5,21,181	25,102	4,96,079
Western Nāra	7,46,166	43	7,46,123
Hyderabad Canals	6,18,656	450	6,18,206
Fuleli do.	30,732	3	30,729
Karāchi do.	3,20,001	48	3,19,953
Total, Works for which only Revenue Accounts are kept ...	22,36,736	25,646	22,11,090
<i>Agricultural Works for which Capital or Revenue Accounts are not kept.</i>			
Kāshmor Bund	5,563	.....	5,563
Grand Total ...	49,46,039	35,804	49,10,235

FRED. HUTCHINSON,
Examiner, Public Works Accounts.

STATEMENT No. I-E.

Statement of Areas irrigated by Irrigation Works in Sind during the year 1892-93.

Names of Canals.	AREA IRRIGATED IN ACRES.						AVERAGE DISCHARGE IN CUBIC FEET PER SECOND.				ACRES IRRIGATED PER CUBIC FOOT PER SECOND.				
	Kharif.	Rabi.	Total.	Flow.	Lift.	Double cropped.		At Head.		Utilized.		Discharge at Head.		Utilized.	
						Area irrigated.	Percentage of total area.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAJOR WORKS.															
Productive Works.															
Begari Canals ...	(Desert Canal ...	83,356	11,990	95,346	85,773	9,583	520	0-55	1,984	...	...	49-01	...	...	...
	(Unharwah ...)	19,761	3,518	23,277	22,289	968	304	1-29	616	...	...	30-50	...	...	...
	(Begari Canal ...)	161,006	41,330	202,336	165,704	26,924	8,893	4-46	2,582	...	...	49-36	...	...	...
Eastern Nara ...	(Mithrao Canal...	100,019	21,313	121,332	83,002	38,330	2,715	2-23	2,352	907	...	47-52	20-41	...	...
	(Thar Canal ...)	45,700	1,239	46,939	41,910	5,019	2,107	4-61	916	239	...	49-89	4-86	...	...
MINOR WORKS.															
Works for which Capital and Revenue Accounts are kept.															
Ghar Canals ...	(Sukkur Canal ...	53,225	30,896	84,121	73,489	11,632	20,640	23-18	1,994	532	...	31-23	58-76	...	...
	(Ghar Canal ...)	189,996	66,437	256,433	249,338	6,017	80,927	31-59	6,477	...	...	29-29	...	...	...
	(Meharibagh ...)	9,098	1,553	11,551	1,063	10,188	...	...	239	...	...	42-17	...	...	...
	(Alibhar Kacheri ...)	10,271	701	10,972	854	10,388	...	0-34	299	...	...	34-35	...	...	...
	(Marak ...)	54,634	4,132	58,766	10,695	48,091	441	0-75	1,403	...	...	38-89	...	...	...
	(Surfaka ...)	25,000	2,870	27,870	2,796	25,974	177	0-59	640	...	...	42-96	...	...	...
Fuleli Canals ...	(Fuleli ...)	231,991	46,963	278,954	230,240	111,734	0,866	2-07	7,401	...	...	38-10	...	...	...

*Includes unauthorized cultivation of 101 acres.

STATEMENT II-E.

Statement showing Incidence of Working Expenses on Assessed Revenue on Canals in Sind during 1892-93.

Canals.	Average discharge of the year at Canal head in cubic feet per second.	WATER-RATE ASSESSED, 1892-93.					Gross assessed Revenue from all sources less refunds and Reserve for contingencies, see Column 13 of Statement IV-C.	Working expenses, direct and indirect, see Column 14 of Statement IV-C.	Acres irrigated during the year 1892-93.	WORKING EXPENSES.			90 PER CENT. OF NET CONSOLIDATED ASSESSMENT.		TOTAL WATER-RATE, DIRECT AND INDIRECT.	
		Occupiers.	Owners.	Total Direct.	Indirect.	Total of Direct and Indirect.				Per cent. on Gross Revenue.	Per Acre irrigated.	Per cubic foot per second of discharge at Canal-head.	Per Acre irrigated.	Per cubic foot per second of discharge at Canal-head.	Per Acre irrigated.	Per cubic foot per second of discharge at Canal-head.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MAJOR WORKS.																
Productive Works.																
Begari Canal District ...	(Desert Canal ...)	1,984	...	36,936	99,960	1,38,796	1,37,056	1,07,441	95,156	78-39	1-13	54-15	1-05	50-38	...	...
	(Unharwah ...)	646	...	...	43,373	43,371	43,374	15,679	23,277	36-3	0-67	23-20	1-66	66-99	...	...
	(Begari Canal ...)	8,908	...	20,584	5,70,985	4,09,612	3,62,382	72,551	198,779	20-02	0-38	19-00	1-09	80-06	...	...
Eastern Nara District ...	(Mithrao Canal ...)	2,352	...	179	2,56,081	2,50,260	2,51,591	67,961	121,332	27-91	0-56	23-69	2-06	106-52	...	...
	(Thar Canal ...)	916	...	1,661	86,557	91,971	91,591	24,518	46,939	26-77	0-52	26-77	1-91	97-82	...	...
	(Eastern Nara ...)	...	...	568	1,25,769	1,26,277	1,39,104	67,070	75,121	23-57	0-76	...	1-67	...	...	...
Total, Major Works ...		9,800	...	63,561	7,79,619	10,48,180	10,24,878	3,45,226	554,624	33-68	0-62	...	1-76	...	...	...
MINOR WORKS.																
For which Capital and Revenue Accounts are kept.																
Ghar Canals District...	(Sukkur Canal ...)	1,864	...	1,170	2,15,761	2,16,931	1,29,211	42,163	89,121	33-63	0-47	22-62	2-42	115-76	...	...
	(Ghar Canal ...)	6,477	...	3,947	7,33,189	7,37,036	6,07,792	1,55,473	236,155	25-58	0-61	24-00	2-86	113-20	...	...
Hyderabad Canals District.	(Meharibagh ...)	230	...	1	20,808	20,809	...	...	11,351	...	...	...	...	...	...	...
	(Alibhar Kacheri ...)	299	...	461	20,113	20,580	3,094	...	10,972	...	...	...	...	...	...	...
	(Marak ...)	1,405	...	2,494	1,17,037	1,19,531	90,471	34,575	46,798	67-01	0-58	24-01	1-99	83-31	...	...
	(Surfaka ...)	610	...	1,536	42,580	41,576	25,874	14,545	29,770	53-13	0-48	24-25	1-44	66-94	...	...
Fuleli Canals District ...	(Fuleli ...)	7,401	...	24,329	5,77,538	6,01,867	5,57,768	1,48,018	331,974	41-37	0-45	30-00	1-14	78-04	...	...
Total, Minor Works ...		18,316	...	33,834	17,27,306	17,61,140	11,78,179	3,91,091	788,029	33-24	0-50	21-39	2-19	91-33	...	...
Grand Total ...		28,116	...	1,02,395	27,06,925	28,09,320	22,08,157	7,36,917	1,342,653	33-44	0-55	...	2-01	...	...	...

H. M. THOMPSON, M.Inst.C.E.,

*Superintending Engineer, Indus Left Bank Division.

STATEMENT III-E.

Statement of Quantity and Value of Crops irrigated in Sind during the year 1892-93.

Description of Crops.	BEGANI CANALS DISTRICT.										SIKAHPOOR CANALS DISTRICT.									
	Desert Canal.		Unharwah.		Begati Canal.		Kashmor Band.		Total.		Other Canals in Rohri.		Sind Canal.		Total.					
	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
Kharif	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.				
	603	7,188	631	8,865	7,064	1,32,325	18	135	8,816	1,48,523	5,736	1,29,372	28,491	6,30,329	29,227	7,49,901				
	+141	+2,110			+377	+1,652														
	31,622	3,10,331	7,177	74,412	74,837	15,43,361	279	2,316	113,915	17,30,920	55,227	7,75,801	26,573	6,53,409	81,805	14,29,210				
	+27,732	+4,85,311			+13,543	+2,37,010														
Rabi	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.	Acrea.	Ra.				
	10,622	33,061	7,890	36,505	18,291	1,74,384	176	205	36,539	2,46,155	3,565	52,291	1,007	18,341	4,572	70,632				
	+3,364	+1,27,837			+1,617	+19,790														
	21	233	165	2,272	88	1,329	118	1,785	392	5,610	1,098	7,047	46	1,964	1,074	9,011				
	+47	+469			+50	+9,504														
Total	7,365	1,24,681	3,938	80,411	29,862	9,65,707	238	3,103	41,573	12,10,402	1,549	34,190	3,594	2,21,934	5,143	2,56,124				
	+1,709	+36,585			+3,360	+1,15,693														
	50,363	4,88,894	19,761	2,02,465	130,082	26,42,707	829	7,544	291,035	33,41,610	67,105	9,98,391	54,716	25,45,977	121,821	25,44,878				
	+32,993	+6,52,312			+21,017	+3,78,649														
	2,972	47,759	1,957	31,003	4,690	1,03,072	1,971	31,538	11,510	2,13,372	59,137	11,39,427	10,698	5,16,327	69,765	16,55,754				
Total under both heads	+168	+3,942			+47	+1,099														
	4	53	19	191	64	1,156	40	532	127	1,931	196	2,461	32	1,079	228	3,540				
	4,809	49,318	1,496	12,154	30,495	6,01,618	31	194	36,891	6,03,284	2,844	35,444	660	12,700	3,513	48,144				
	+3,248	+48,867			+5,518	+92,770														
	453	10,391	326	2,663	9,049	1,87,499	238	2,025	10,275	2,02,771	2,800	56,480	2,181	44,822	4,981	1,01,202				
Total	8,408	1,07,521	3,817	46,011	44,208	8,93,537	2,280	31,239	53,803	10,81,358	64,997	12,33,812	13,490	5,74,928	78,487	18,08,740				
	+3,832	+61,096			+5,671	+86,200														
	68,861	5,06,415	23,578	2,45,476	174,290	35,36,244	2,109	41,853	269,838	44,22,968	133,103	22,82,713	68,206	21,20,296	290,308	43,53,618				
	+36,825	+7,14,008			+28,668	+4,64,549														

Note.—The black figures denote cultivation and value of Khairi lands.

		Acrea.		Ra.	
Cultivation	(Government)	2,109,838	Total estimated value	45,367,581	
	(Khairi)	61,513		+11,71,587	
		2,171,351		46,539,168	
		2,171,351		46,539,168	
		2,171,351		46,539,168	

EASTERN NARDA DISTRICT.

Description of Crops.	Narda Supply Channel.						Eastern Narda.			Mithras Canal.			Dimwah.			Haranwah.			Khipra Canal.			Thar Canal.			Total.	
	Area irrigated.		Estimated value.		Area irrigated.		Area irrigated.		Estimated value.		Area irrigated.		Estimated value.		Area irrigated.		Estimated value.		Area irrigated.		Estimated value.		Area irrigated.		Estimated value.	
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33										
Kharif	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rabi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	10,620	3,05,115	6,752	73,415	18,118	2,58,158	630	8,892	18	210	218	2,349	192	2,397	35,548	6,00,526										
Wheat	15	361	47	296	144	384	...	...	...	...	...	...	9	51	215	1,092										
Barley	686	13,929	10,941	66,887	3,024	13,920	210	2,650	17	102	1,036	2,671	907	2,567	17,421	1,02,126										
Oil-seeds	335	10,704	7,793	45,136	2,142	16,680	7	109	30	615	37	835	2,318	1,890	12,662	75,909										
Other Crops	11,656	3,30,112	24,533	1,85,731	24,028	2,89,142	847	11,141	65	937	1,291	8,355	3,426	6,805	65,546	8,29,743										
Total	12,021	3,44,826	48,124	5,02,534	124,047	16,94,169	6,680	1,34,037	2,721	71,078	7,510	82,026	40,126	5,13,291	250,829	33,32,651										
Total under both heads																										

STATEMENT III-B—continued.

GHAR CANALS DISTRICT.										HYDERABAD CANALS DISTRICT.																					
Sukkur Canal.					Ghar Canal.					Total.					Munirabad.					Safraz.					Other Canals.					Total.	
Area		Estimated		Total.	Area		Estimated		Total.	Area		Estimated		Total.	Area		Estimated		Total.	Area		Estimated		Total.	Area		Estimated		Total.		
irrigated	value.	irrigated	value.		irrigated	value.	irrigated	value.		irrigated	value.	irrigated	value.		irrigated	value.	irrigated	value.		irrigated	value.	irrigated	value.		irrigated	value.	irrigated	value.		irrigated	value.
1	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51													
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.		
Rice ...	27,281	7,11,932	126,681	37,56,942	133,962	41,68,574	12	445	...	...	49	704	63	459	1,842	31,871	1,466	33,479													
Jowari ...	20,135	4,25,133	55,397	10,00,914	75,532	14,28,077	4,787	2,05,804	361	5,041	2,255	15,538	994	11,855	71,335	20,45,557	79,732	22,88,795													
Bajri ...	932	16,798	3,017	46,668	3,979	63,466	3,012	1,41,241	8,564	1,16,166	37,869	4,61,427	22,039	3,68,123	1,80,283	27,50,047	221,787	38,37,004													
Cotton ...	34	1,292	144	4,368	178	5,660	95	9,450	408	15,867	9,631	2,88,753	2,556	84,689	19,404	4,52,911	32,094	8,51,650													
Other Crops ...	9,843	2,26,193	4,428	96,812	14,271	3,23,003	1,792	22,139	918	25,273	4,830	1,23,264	1,848	33,750	34,792	9,07,286	44,180	11,11,712													
Total ...	58,225	13,81,346	189,697	49,05,434	247,922	62,86,782	9,698	3,79,059	10,271	1,62,347	54,634	8,89,686	27,500	4,98,876	277,156	61,87,672	379,259	81,17,640													
Wheat ...	25,895	10,94,846	40,132	14,87,561	66,327	25,82,227	1,043	32,610	196	2,941	147	9,250	1,061	42,084	21,755	6,87,216	24,502	7,74,101													
Barley ...	95	2,114	158	4,363	253	6,477	10	151	...	...	...	...	1	16	756	19,782	737	12,949													
Oil seeds ...	2,919	67,982	23,038	3,32,412	26,007	4,00,394	198	1,048	502	5,147	13,713	32,668	651	9,879	17,730	2,01,042	22,814	2,49,784													
Other Crops ...	3,381	29,214	4,311	57,047	7,692	86,264	302	2,412	40	967	413	6,519	734	26,077	8,038	1,89,061	9,515	2,25,696													
Total ...	32,350	11,94,176	67,959	18,81,183	100,279	30,75,359	1,553	36,221	738	9,055	4,893	48,437	2,447	78,056	48,237	10,90,101	57,568	12,61,879													
Total under both heads...	90,545	25,75,524	297,656	67,86,617	348,201	93,62,141	11,251	4,15,280	11,009	1,71,402	59,227	9,38,123	29,917	5,76,932	325,368	72,77,773	436,827	93,79,510													

Description of Crops.		FULELI CANALS DISTRICT.						WESTERN NARA DISTRICT.						KARACHI CANALS DISTRICT.					
		Fuleli Canal.			Other Canals.			Total.			Western Nara and other Canals.			Canals.			Banda.		
		Area irrigated.	Estimated value.	Acres.	Area irrigated.	Estimated value.	Rs.	Area irrigated.	Estimated value.	Ra.	Area irrigated.	Estimated value.	Ra.	Area irrigated.	Estimated value.	Ra.	Area irrigated.	Estimated value.	Ra.
1		52	53	55	54	55	57	56	57	58	59	60	61	62	63	64	65	65	65
Kharif	Rice ...	148,760	14,86,079	7,692	28,081	155,452	15,14,160	61,056	11,99,783	125,108	11,06,902	693	6,694	125,801	11,13,296	125,801	11,13,296	125,801	11,13,296
	Jowari ...	5,321	50,334	346	3,564	5,697	53,918	97,092	10,13,758	2,667	6,12,844	...	...	2,667	6,12,844	2,667	6,12,844	2,667	6,12,844
	Bajri ...	102,702	14,66,948	7,506	94,307	110,208	15,61,255	9,723	75,190	29,514	5,79,943	...	...	29,514	5,79,943	29,514	5,79,943	29,514	5,79,943
	Cotton ...	14,274	6,79,574	57	2,565	14,381	6,82,139	215	4,986	51	1,798	...	...	51	1,798	51	1,798	51	1,798
	Other Crops ...	10,553	2,86,611	657	19,544	11,594	4,00,155	3,497	1,16,488	6,371	1,45,125	...	...	6,371	1,45,125	6,371	1,45,125	6,371	1,45,125
Total		281,991	39,63,566	16,258	1,48,061	298,249	41,11,627	172,183	24,03,295	163,741	24,46,512	693	6,694	164,434	24,51,506	164,434	24,51,506	164,434	24,51,506
Rabi	Wheat ...	16,967	3,05,763	2,062	42,883	19,949	3,46,596	84,238	9,01,664	2,464	9,25,848	...	...	2,464	9,25,848	2,464	9,25,848	2,464	9,25,848
	Barley ...	4,398	23,155	64	239	4,346	22,394	5,008	38,136	11,694	1,05,894	6	19	11,700	1,05,913	11,700	1,05,913	11,700	1,05,913
	Oil-seeds ...	21,935	2,32,443	1,769	9,947	23,796	2,42,390	44,226	5,75,555	14,369	4,24,085	6	61	14,375	4,24,096	14,375	4,24,096	14,375	4,24,096
	Other Crops ...	13,468	3,34,707	355	9,799	13,840	3,44,506	25,600	82,989	17,620	13,06,105	...	...	17,620	13,06,105	17,620	13,06,105	17,620	13,06,105
Total		56,761	8,96,068	4,270	62,515	61,031	9,38,886	160,482	15,96,347	46,147	27,31,682	12	80	46,159	27,31,682	46,159	27,31,682	46,159	27,31,682
Total under both heads		338,752	48,59,634	20,528	2,10,575	359,280	50,70,513	322,665	40,01,582	309,888	52,86,694	705	6,774	210,593	52,86,694	210,593	52,86,694	210,593	52,86,694

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

BUKKUR GAUGE.

Series of reading for the year 1892.

Series of Mean readings for 10 years ending 1892.

Series of Mean readings for 4 years ending 1891.

Days.	JUNE.			JULY.			AUGUST.			SEPTEMBER.							
	Readings for 1892.	10 years M. ending 1892.	4 years M. end. 1891.	Readings for 1892.	10 years M. ending 1892.	4 years M. end. 1891.	Readings for 1892.	10 years M. ending 1892.	4 years M. end. 1891.	Readings for 1892.	10 years M. ending 1892.	4 years M. end. 1891.					
1	8	6	8	9	8	21	6	9	10	11	21	2	12	10	13	11	9
2	8	6	8	8	9	21	6	9	10	11	21	2	12	10	13	11	9
3	8	6	8	8	9	21	6	9	10	11	21	2	12	10	13	11	9
4	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
5	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
6	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
7	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
8	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
9	7	11	9	6	9	1	8	11	7	12	5	11	7	12	5	11	7
10	7	9	10	8	9	12	8	13	12	10	13	11	11	11	11	11	9
11	7	8	9	10	8	9	12	11	12	10	13	11	11	11	11	11	9
12	7	8	9	10	8	9	12	11	12	10	13	11	11	11	11	11	9
13	7	8	9	10	8	9	12	11	12	10	13	11	11	11	11	11	9
14	8	4	10	10	7	9	10	10	13	2	17	16	3	16	3	16	3
15	8	4	10	10	7	9	10	10	13	2	17	16	3	16	3	16	3
16	8	4	10	10	7	9	10	10	13	2	17	16	3	16	3	16	3
17	7	10	10	2	10	9	21	8	13	5	15	9	16	7	14	9	16
18	7	5	10	2	10	8	11	13	7	13	1	16	9	14	7	7	1
19	7	6	10	5	10	8	12	3	13	3	15	3	16	5	14	5	17
20	7	6	10	5	10	8	12	3	13	3	15	3	16	5	14	5	17
21	7	7	10	5	10	8	12	3	13	3	15	3	16	5	14	5	17
22	7	4	10	6	10	8	12	4	13	11	13	4	16	2	14	4	12
23	7	4	10	6	10	8	12	4	13	11	13	4	16	2	14	4	12
24	7	3	10	5	10	7	12	4	13	9	15	2	15	3	12	6	8
25	7	3	10	5	10	7	12	4	13	9	15	2	15	3	12	6	8
26	6	11	10	6	10	8	12	5	13	16	13	4	10	8	6	8	5
27	6	10	10	7	10	9	13	7	13	7	12	14	10	12	10	11	9
28	4	7	10	7	10	6	11	8	13	2	15	3	13	3	12	6	5
29	6	10	8	10	9	11	13	2	15	4	13	2	13	6	11	7	5
30	6	6	10	9	11	0	12	5	13	8	12	4	13	2	13	3	2
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

KOTRI GAUGE.

Series of reading for the year 1892.

Series of Mean reading for 10 years ending 1892.

Series of Mean reding for 4 years ending 1891.

Year.	JUNE.			JULY.			AUGUST.			SEPTEMBER.			REMARKS.		
	Readings for 1890.	10 years M. ending 1893.	3 years M. end. Aug 1891.	Readings for 1897.	10 years M. ending 1902.	3 years M. end. Aug 1901.	Readings for 1892.	10 years M. ending 1897.	3 years M. end. Aug 1891.	Readings for 1892.	10 years M. ending 1897.	3 years M. end. Aug 1891.			
1	72	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	Pa. in.	1891.		
2	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
3	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
4	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
5	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
6	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
7	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
8	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
9	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
10	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
11	11	10	11	0	11	13	5	12	9	10	3	12	5	1891.	
12	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
13	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
14	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
15	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
16	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
17	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
18	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
19	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
20	10	12	9	12	5	11	4	13	5	10	3	12	5	1891.	
21	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
22	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
23	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
24	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
25	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
26	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
27	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
28	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
29	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
30	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.
31	9	11	13	4	12	5	11	4	13	5	10	3	12	5	1891.

• H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

List of Highest Readings on Bukkur and Kotri Gauges from 1883 to 1892.

BUKKUR GAUGE.

1887.			1888.			1889.			1890.			1891.			1892.		
Date and Month.	Feet.	Inches.	Date and Month.	Feet.	Inches.	Date and Month.	Feet.	Inches.	Date and Month.	Feet.	Inches.	Date and Month.	Feet.	Inches.	Date and Month.	Feet.	Inches.
17th July ... 15	11	11	10th August ... 15	9	9	10th July ... 16	5	14	24th August ... 10	7	7	15th August ... 14	9	16	18th August ... 9	16	9
KOTRI GAUGE.																	
26th July ... 18	9	27th August ... 19	2	20	4th September ... 20	4	12th August ... 20	3	22nd August ... 10	8	11	3rd September ... 17	19	9	27th August ... 21	4	4

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

Statement showing the number of days on which Bukkur and Kotri Gauges read above 13 and 17 feet respectively.

BUKKUR.					KOTRI.					
Year.	Dates on which the gauge reads above 13 feet continuously.	Total number of days.	Dates on which the gauge reads below 13 feet, viz. broken after once rising to and above 13 feet.	Total number of days.	Year.	Dates on which the gauge reads above 17 feet continuously.	Total number of days.	Dates on which the gauge reads below 17 feet, viz. broken after once rising to and above 17 feet.	Total number of days.	Remarks.
1890 ...	From 11th to 15th July=5 days and from 30th July to 30th August=32 days.	37	16th to 29th July ...	14	1890 ...	From 17th to 19th July=3 days and from 2nd August to 4th September =34 days.	37	From 20th July to 1st August.	13	
1891 ...	From 22nd to 23rd July=2 days, and from 30th July to 26th August=28 days.	30	24th to 29th July ...	6	1891 ...	From 25th July to 7th September.	45	Nil.	Nil.	
1892 ...	From 22nd to 23rd July=2 days and from 31st July to 4th September=36 days.	38	From 24th to 30th July.	7	1892 ...	From 4th August to 11th September=39 days and from 15th to 16th September=2 days.	41	From 12th to 14th September.	3	Year under report.

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

No. 5779 of 1893.

FROM THE SUPERINTENDING ENGINEER,
Indus Left Bank Division;

TO THE SECRETARY TO GOVERNMENT,
Public Works Department,
Bombay.

PUBLIC WORKS DEPARTMENT :
Camp Khipra, 30th December 1893.

SIR,

I have the honour to forward the Irrigation Revenue Report for Sind for 1892-93, with accompaniments, in which is included Table I—A for the first time; it is not quite complete and some of the figures may have to be corrected next year as they are still under reference.

I have the honour to be,

Sir,

Your most obedient Servant,

H. M. THOMPSON, M.Inst.C.E.,
Superintending Engineer, Indus Left Bank Division.

Through the Commissioner in Sind.

No. 225 of 1894.

REVENUE DEPARTMENT.

Commissioner's Office,
Camp Thul, 25th January 1894.

Submitted to Government.

2. The net consolidated revenue from canals in 1892-93 amounted to Rs. 54,53,332 against Rs. 50,44,749 in the previous year. The total area under cultivation during the year under review was acres 2,167,959 against acres 1,949,717 in 1891-92. Thus the increase in cultivation and assessment was as under:—

		Acres.
(a) Increase in cultivation	...	218,242
		Rs.
(b) Do. in assessment	...	4,50,624

3. The increase from kharif and rabi separately was as follows:—

I.—Kharif.

		Acres.
(a) Increase in area	...	119,508
		Rs.
(b) Do. in assessment	...	1,08,062

II.—Rabi.

		Acres.
(a) Increase in area	...	98,734
		Rs.
(b) Do. in assessment	...	3,00,521

4. The inundation of 1892-93 at first bore a striking resemblance to that of 1887-88, which was described as *very poor*, somewhat irregular and deficient.

But as the results obtained tell a different tale, the inundation under review must, as Mr. Thompson observes, be styled as peculiar. There was practically no water in May and June for the early kharif crops such as rice and cotton and where crops had been sown on the main canals they were withering for want of water. In the middle of the season, however, the river rose to its maximum height and the distributary canals were full to the brim. Then followed a copious fall of rain and the result was that heavy floods escaped over the country, most notably in the Shikárpur canals, Western Nára and Karáchi canals districts.

5. In spite then of an untoward commencement the area of cultivation and canal revenue increased largely, and by comparing this year's results with those of 1889-89, which was the best inundation year on record and in which the area of cultivation was just $\frac{1}{2}$ lakh acres less than in 1892, Mr. Thompson comes to the conclusion (paragraph 1) that Sind Irrigation is gradually coming to be less dependent on the character of the inundation. This has been remarked before, and no doubt Government would expect that the great and incessant care which the Engineers have bestowed on the canals and bunds should gradually show its effects, even with a river of such boundless and uncontrollable vagaries as the Indus. But the result is none the less satisfactory and creditable to the Irrigation Department. In spite of an unseasonable rise of the river, coupled with such widespread fever and cholera that in the Delta and south of Hyderabad panic and abandonment of villages and fields was observable, the year 1892-93 is the best year on record and should encourage the Government of India in the further development of irrigational works in Sind.

6. The following table exhibits the effects of the inundation of 1892-93 on the area under cultivation on Government land in the several canal districts as compared with the previous year:—

Canal Districts.	CULTIVATION (ACRES).					
	Kharif.		Rabi.		Total.	
	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begári Canals District ...	195,494	149,081	49,058	52,122	244,552	201,203
Shikárpur do. ...	112,851	83,868	75,098	51,656	187,949	135,524
Ghár do. ...	237,860	228,297	93,700	91,083	331,569	319,380
Western Nára District ...	164,158	162,875	136,789	83,728	300,947	246,603
Eastern Nára do. ...	181,459	142,837	57,069	62,118	238,528	204,955
Hyderabad Canals District ...	333,761	329,912	60,767	32,630	394,528	362,542
Fuleli do. ...	248,853	246,204	44,471	43,637	293,324	289,841
Karáchi do. ...	158,605	170,459	27,957	19,210	186,562	189,669
Total ...	1,633,041	1,513,533	534,918	436,184	2,167,959	1,949,717

7. It will be noticed that to the general increase under the head kharif—

	Acres,
The Begári Canals District contributed ...	46,000
Eastern Nára ...	39,000
Shikárpur Canals... ..	29,000

while in the Karáchi Canals Division alone a deficit is visible of 12,000 acres in round figures. On the other hand, the increase in rabi has been contributed by each canal district as under:—

	Acres in round figures.
1. Shikárpur Canals... ..	24,000
2. Ghár do. ...	2,000
3. Western Nára do. ...	53,000
4. Hyderabad do. ...	18,000
5. Fuleli do. ...	1,000
6. Karáchi do. ...	8,000
Total ...	106,000
Deduct decrease in—	
7. Begári. Canals ...	3,000
8. Eastern Nára do. ...	5,000
Total ...	8,000
Net Increase ...	98,000

8. The increase in kharif in the Begári Division was shared by all the canals in that Division, the kharif cultivation on the Desert Canal alone having risen from 25,000 acres to 50,000 owing to its mouth working better. The decrease in rabi on the Unnarwah and the Begári is apparent only, due to the previous year's kharif failure having abnormally enlarged the rabi area. The increase in kharif in the Eastern Nára was chiefly contributed by the Nára, the Mitrao and the Thar Canals. The decrease in rabi in the Eastern Nára is ascribed to the "flood waters having lasted for a shorter period than usual and to the exceptionally heavy rain which swamped a large area which would have been otherwise sown." The Commissioner regrets he cannot understand this. He believes the decrease is only due to floods not reaching the unprotected area. The Shikárpur Canals District shows a large combined increase under both kharif and rabi. The general increase in rabi is attributable to the lateness of the inundation which led to much land prepared for kharif being sown in rabi, to seasonable rainfall bringing to maturity many late sown crops which might have failed, and to the material assistance which the canals received from hill and other floods. But the canals are only credited with the revenue of lands which are dependent on the canals and not on river spill for their cultivation, although in particular instances the advent of a direct flood may have rendered the canal supply of water of minor importance or even superfluous. Mr. Thompson mentions in paragraph 14 items of Rs 2,71,863 credited to the canals in Shikárpur and Karáchi as due to "spill except from canals." This is in accordance with the orders of Government in paragraph 11 of the Resolution on last year's report that "spill" should be distinguished from "flow," and the figure represents the assessment on lands which would have been irrigated from the canals by flow had not the natural river spill rendered artificially-led water unnecessary. The result of this arrangement will, no doubt, come as a surprise to Government, since, as Mr. Thompson shows in paragraph 15, the Deharwah now appears, thanks to the floods, to have paid magnificently, although, as a reference to Government Resolution No. 84 W. I.—1161 of 25th July last will show, if the revenue on lands irrigated by the canal alone were considered, the return would have been only one-third. This, however, is an exceptional case. The flood did not appear in Ubauro during 1893-94 and therefore the revenue of the Deharwah will fall back to its old level. But when the scheme now under consideration is carried out the whole of these lands will be cultivated on flood-water guided to them by the canal. Meanwhile, as long as the discrimination between lands flooded by natural and artificial spill is shown, the return is quite accurate, for it would be practically impossible to say, in every case of lands assisted by river or hill floods, how much of the water came from the canal itself and how much additional cultivation was caused by the flood; so too great refinement in this matter is to be deprecated. The Rohri floods are peculiar no doubt, and the difference caused by their appearance is more marked than in other Canal Divisions. The Commissioner notices that by some error in the particular case of the Deharwah the revenue shown as derived from canal lands, which were cultivated on the floods from the river has not been included under the heading "spill except from Government canals" as should have been the case. He will enjoin the taking of greater care in the returns communicated to the Superintending Engineer next year. Apart from adventitious aid to the canal revenue from occasional floods it is also to be remembered that the gradual growth of population in Sind and the accumulation of wealth by the agricultural classes are leading to extension of holdings wherever water is available, so that even though bad seasons may cause fluctuations a steady growth of revenue should ordinarily be looked for, provided only that additional supplies of water are steadily given. An excellent example of good results from small outlay on old canals is given in paragraph 15.

9. Out of the deficit of 12,000 acres of kharif cultivation in the Karáchi Canals Division no less than one-half is shown against the Ochto and Kokawari branches of the river and the remainder against the other minor canals. The lower portion of the Delta is very unfortunate. Owing to the Ochto having been nearly deserted by the river large areas of rice lands are going out of cultivation, while the abnormal height to which the river rises at the climax of the inundation causes floods which break all the embankments or where no embankments

exist flood out the cultivation entirely. Added to this, the crops being almost entirely rice, the effect of the slow rise in the river was specially marked in this region and the floods which subsequently swept over it did not counterbalance the loss sustained both by the people and the Government, as would have been the case in Upper Sind, because the humid climate of the Delta is unfavourable to such crops. The result has been that the net consolidated revenue in 1892-93 amounted to Rs. 3,67,763 against Rs. 4,74,251 in the previous year, showing a decrease of Rs. 1,06,448.

10. The table in paragraph 5 of the report shows that the kharif area under Major works during the year under report exceeded that of the past year as well as that of the past 5 years' average. The rabi area under the same head, though it exceeded the past 5 years' average by 13,500 acres, was less than that of the year 1891-92 by 7,477 acres. The decrease in rabi was no doubt due to the fact that when the Desert Canal failed in 1891-92 the cultivators in the Begári District were induced by the grant of liberal takávi advances to attempt rabi. The kharif cultivation on the Desert Canal having recovered during 1892-93 has thrown back the rabi area to its normal standard. The area of kharif under Minor canals for which capital accounts are kept exceeded that of—

	Acre.
(a) past year by ...	16,221
(b) past 5 years' average by ...	29,718

and the rabi acreage exceeded that of—

	Acre.
(a) past year by ...	6,324
(b) past 5 years' average ...	40,754

On canals falling under the head "Revenue" the excess both in kharif and rabi was as under :—

Kharif.

	Acre.
(a) over past year ...	18,252
(b) over past 5 years' average ...	3,485

Rabi.

	Acre.
(a) over past year ...	100,523
(b) over past 5 years' average ...	153,887

These figures no doubt demonstrate that the distributory canals in Sind under the able and judicious guidance of the Superintending Engineer in Sind, aided by a capable staff, were able to maintain steadily the area under kharif cultivation in an inundation unfavourable to that species of cultivation and to show remarkably good results under rabi, the extensive growth of which was rendered possible on high lands situated on the smaller canals by a late and high inundation.

11. The total area of jágghir cultivation in British territory during the year 1892-93 amounted to acres 167,582 (*vide* statement A-1) and the revenue demand thereon was Rs. 66,134 (*vide* Statement B.-1.) The corresponding figures for the previous year were acres 165,192 and Rs. 66,813. As this return is (for reasons which, though doubtless good, are not very intelligible) prepared for the financial year and includes the results of portions of two inundations (*i.e.* 1891 and 1892) it is not possible to comment on these figures in the light of the inundation under review. The figures as they stand, however, shew that while the kharif area decreased by 1,603 acres as compared with the past year, the kharif revenue thereon increased by Rs. 494. On the other hand, while the rabi area increased by 3,993 acres the rabi revenue fell off by Rs. 1,173, showing a net increase of acres 2,390 in area and a net decrease in revenue to the amount of Rs. 679. This is due to a smaller area of kharif bearing a higher rate and a larger area bearing a smaller rate having been cultivated during the term.

12. Mr. Thompson has again introduced the statement of the estimated loss to Government in supplying water to jágghir lands in Sind and quotes Government Resolution No. 1,665, dated 6th March 1893, in the Revenue Department,

for his authority in doing so. But this seems to have been superseded by paragraph 22 of Government Resolution No. W.-I.—658, dated 26th April 1893, reviewing last year's report.

13. It will be seen from the first quoted Resolution that the idea of raising the existing rates of Hakábo has been given up for the present. It has been left to the Commissioner to raise the rate (within the present maximum of 10 annas for acres) in any individual case in which it appears to the Commissioner that the present payment is not adequate. It has not been deemed desirable to take any action in this direction pending the completion of the jághir survey and the collection of correct figures of jághir cultivation for 2 or 3 years. The jághir survey is now completed and the Collectors have been requested to utilize the survey registers in recording jághir cultivation and assessing Hakábo according to the areas recorded in the registers with effect from 1893-94. The results of this have to be seen. When accurate returns of area are available special enquiries will be made as to whether in particular cases a higher water-rate should be demanded or not. The question is not without considerable difficulties but will be taken up as soon as full and trustworthy data of cultivation have been collected.

14. The cultivation in Kelat improved as in the rest of Sind, but only slightly. The total assessment for 1892-93 amounted to Rs. 63,517. This, together with the unrealized balances of the previous year, amounted to Rs. 1,07,200. Of this Rs. 20,360 were remitted and Rs. 54,069 were collected against Rs. 20,741 in 1891-92, leaving a balance of Rs. 32,771 against Rs. 43,683 in the previous year. Statement C-3 shows that the falling off shown under this head at Rs. 59,217 as compared with the past '5 years' average in 1891-92, was reduced to Rs. 14,341, and this, so far as it goes, is satisfactory. The revenue has, however, fallen steadily off from Rs. 78,472 to Rs. 43,157, and while complaints from the Kelat land-owners never cease the Irrigation Department complains of the undue draw-off by Kelat zamindárs of water at the tail of the Desert Canal (whenever it is in good working order, that is to say) as positively injuring that work. A separate canal outside Sind for the Kelat lands is a great desideratum and the Commissioner is hopeful that such a project may be matured and paid for by the Khan of Kelat.

15. Statements C, C-1, and C-2 show that the total amount for collection (excluding remissions, but including balances) amounted to—

	Rs.
(a) on Government land	55,00,362
(b) on Jágir lands	77,027
(c) on Kelat lands	86,840
(d) on account of Miscellaneous Canal Revenue	64,886
	Rs. 57,29,115

Of this sum, Rs. 56,19,101 were collected during the year, leaving a balance of Rs. 1,10,014 sub-divided as follows :—

	Rs.
(a) on account of Government lands	61,597
(b) on account of Jágir lands in British territory	15,646
(c) on account of Kelat lands	32,771
	Rs. 1,10,014

Excepting lands in Kelat, in the case of which the outstandings have been reduced from Rs. 43,683, the arrears under heads (a) and (b) compare unfavourably with those of 1891-92. In the case of Government lands it appears from the Collector's jamábandi reports that Rs. 9,535 had been collected after the close of the year. If this be deducted the outstandings will be reduced to Rs. 52,062 against Rs. 58,259 in 1891-92. Considering that there was a large increase in the canal revenue this year, the result cannot but be regarded as satisfactory. It will be seen that the balances (due to very bad seasons) have been greatly reduced in the Upper Sind Frontier District. It is in this and in the Karáchi District that postponements had to be granted in cases in which

the kharif crops had been destroyed as the rabi return was not good and the cultivators were suffering from a succession of floods or other calamities. The balances under the head (b) are nominal, for the most part representing the instalments not due at the date of the preparation of the returns. According to the jamabandi returns the balances under (b) and (c) amounted to Rs. 5,323-9-9 and Rs. 2,534-3-2 respectively. The balance under head (b) is due for the most part from sharers in Government Revenue, and it remained uncollected because the parties did not appear to receive payment of their share from which the Hakabo payable by them is deducted and credited to the Public Works Department at the time of payment within the year.

16. Occupancy in 28,932 acres was sold during the year 1892-93, yielding Rs. 2,262 at 4 per cent. on nine-tenth of Rs. 62,813, which with the credit for the previous three years makes the cumulative credit for 1892-93 Rs. 22,884.

17. The assessment on unauthorised cultivation amounted to Rs. 37,838 in 1891-92. The corresponding figure for 1892-93 has not been quoted by the Superintending Engineer though he states that he has included it in his returns this year. So far as the jamabandi returns go, the effect of the orders issued last year in the matter of disposing of applications for land with greater promptitude is not very marked. In a peculiar season, when large areas get saturated and numerous applications pour in, delays are liable to occur and cultivators often begin their operations without waiting to receive written permission.

18. In paragraph 10 the Superintending Engineer alludes to dubari or twice-cropped lands. This cultivation is only possible in favourably situated rice lands which retain much moisture, and the four annas an acre (representing the superiority of the situation and soil) is taken on the whole field whatever the area, sometimes very small, on which the second crop is raised and no remissions are given for failures. If the second crop receives a second watering from a Government canal it will pay Rs. 2 per acre under recent Government orders.

19. Remissions amounted to Rs. 2,50,770 against Rs. 1,43,964 in 1891-92 and Rs. 1,17,777 the past 5 years' average. Owing to the Desert Canal working better, remissions in the Begari Division fell from Rs. 1,06,401 to Rs. 21,458, being lower than the average by about Rs. 10,000 in round figures. Rs. 15,000 were given owing to drought. Remissions in the Shikarpur canals and Eastern Nara districts were insignificant, but those in the Bhar canals district amounted to Rs. 5,752 against Rs. 2,557 in 1891-92 and Rs. 30,587 the past 5 years' average. These were granted on account of spill from minor canals. The Western Nara shows a very large increase of Rs. 79,382 against 1891-92 and of Rs. 73,562 against the past 5 years' average. These were all due to river and Nara floods as well as to injury by hill-torrents pouring into the Nara valley and were much more than recouped by rabi cultivation. Remissions in the Hyderabad canals district were equal to the average (i. e. Rs. 5,073), but those in the Fuleli District amounted to Rs. 19,637 against Rs. 1,268 in 1891-92 and Rs. 6,623 the past 5 years' average. These were mostly due to the breach in the Hajipur Band and the insufficient escapes to the tail of the Gani. The largest remissions this year occurred in the Karachi canals district, where Rs. 1,09,959 were remitted against Rs. 23,306 in 1891-92 and Rs. 28,514 the past 5 years' average. This district and especially the Shahbandar Division fared the worst from the effects of the floods due partly to the rise of level in the lower reaches and partly to heavy torrents from the hills, and the results show how necessary it is to protect this area as far as the bifurcation of the Hajamri and Ochto by a continuous chain of strong embankments.

20. The expenditure on maintenance and repairs (*vide* Statement G, paragraph 23 of the report) amounted to Rs. 9,80,215 against Rs. 9,88,180 in the previous year. There is an increase on Major works owing to special clearance to the Desert Canal. The decrease under Minor works capital is only nominal as Rs. 1,10,975 of the actual expenditure on these works have been transferred to the head "Agricultural" under orders of the Government of India. The cost of establishments on the whole shew a decrease of Rs. 18,290. This is satisfactory and the figure is less by Rs. 4,029 than in 1890-91. The total cost

of maintenance and repairs was then Rs. 9,80,215, to which the Superintending Engineer adds Rs. 2,55,169 as cost of the establishment proper and Rs. 5,03,561 (at one-tenth of the revenue for cost of collection) making a total of Rs. 17,38,945 against Rs. 16,69,898 in 1891-92 and Rs. 16,34,114 the past 5 years' average. The Superintending Engineer can hardly take credit in his accounts for the Village Cess Fund at Rs. 2,75,330 (*vide* paragraph 20 of the report), for this cess is a special levy under an Act of the Legislature for a special object and has been included in and is collected with the assessment only for administrative convenience. The Commissioner, however, concurs with Mr. Thompson in demurring to his Department being saddled with a portion of the cost of the village establishments employed in the collection of the revenue and which are no longer paid by Government. Otherwise so far as it may be necessary to show the entire outcome of the working of the canals Mr. Thompson is welcome to count as part of the actual income due to the canals not only the village but the Local Fund Cess, but, so far as the Imperial Government is concerned, those items should be carefully excluded, or confusion will ensue. This is, however, a subject which can be dealt with separately, and Mr. Thompson has made a separate reference to the Commissioner on the subject of re-considering the percentage of revenue collection charges.

21. The details of expenditure for the past four years are given in the subjoined table :—

Years.	Works.	ESTABLISHMENT DEBITABLE TO WORKS.			Grand Total.
		Supervising.	Abkaláni.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1889-90	7,83,915	62,055	1,19,547	1,81,602	9,65,517
1890-91	8,01,214	69,118	1,06,983	1,76,101	9,77,315
1891-92	8,00,979	84,985	1,02,216	1,87,201	9,88,180
1892-93	8,08,143	89,311	82,761	1,72,072	9,80,215

The decrease in the Abkaláni establishment is marked and satisfactory and is attributed by the Superintending Engineer to a more correct distribution and to the care and economy exercised by executive officers. The sums expended on canals and river embankments, including the establishment charged to works, are as follows :—

Year.	Canals.	Embankments.
	Rs.	Rs.
1889-90	8,64,912	1,00,605
1890-91	8,56,703	1,20,606
1891-92	8,36,789	1,51,391
1892-93	8,20,261	1,59,954

22. Of the sum of Rs. 9,80,215 Rs. 4,46,975 were spent on the removal of silt, and a little more than half of it in the Hyderabad and Fuleli Canals Districts. Of the sum of Rs. 89,619 spent on river embankments, which is larger than last year on repairs and making loops, &c., (Rs. 64,440 + Rs. 25,179), Rs. 53,388 were spent on the Karachi canals bunds alone. These bunds, owing to the rise of the river below Kotri and also the bunds in the Western Nára Division are causing trouble, but no doubt in course of time they will be made secure. It will be observed that an item of Rs. 11,180 incurred on loop bunds was debited to the maintenance grant; and although for lack of other funds there may have been no other alternative, still with the aid of the discretionary grant (which will, it is to be hoped, be enlarged on the first suitable occasion) such items will be paid for separately in the future. The number of small Karia heads in the Delta bunds are undoubtedly an evil, but the Commissioner knows

how energetically in the season, which will be reported on next year, Mr. Dawson took them in hand, and in time the substitution of masonry heads will remove this source of danger. The table given at the end of paragraph 23, describing in detail the manner in which the maintenance and repair grant was spent, is very clear and the Commissioner need scarcely comment upon it. It is to be regretted that sums of Rs. 64,440 and Rs. 25,177 had to be spent on embankments, but there is no alternative and an Executive Engineer in Sind must turn his attention to the safety of the lands first and then to the state of the channels which feed those lands.

23. Under Major works a capital expenditure of Rs. 1,43,353 was incurred in the Eastern Nára District chiefly on the clearance of the Nára between Jatri and Ketí, the construction of Jatri sluice and bunds, shifting the spoil and constructing iron bridges on the Mitrao. The Commissioner is very sanguine of the good these works will do. This report also chronicles the commencement of the much desired Unharwáh extension on which Rs. 17,806 were spent. An expenditure of Rs. 36,382 debitable to revenue under the same head was incurred in connection with the new mouth to the Desert Canal which was commenced last year. The next report will contain the regrettable account of the failure of this work.

24. The expenditure from capital on Minor works, for which capital and revenue accounts are kept, was Rs. 67,392 and was wholly incurred on the construction of regulators and inspection bungalows in the Fuleli District, and Rs. 21,924 were debited to Revenue for works on the great Marak and the Fuleli. On works for which only revenue accounts are kept the total expenditure amounted to Rs. 1,40,416, of which the details are given below:—

	Rs.
1. Pritchard Canal	15,750
2. New feeder Western Nára	70,050
3. Dhamrao Canal	19,612
4. Rohri Dhora feeder	3,078
5. Widening Mirwáh ex-Dad	7,384
6. Restoration of Baghiar embankments	8,689
7. Chandans in the Pinjari in Sháhbandar	4,860
8. Khádi and Jurár Bund	3,502
9. Baragaza Khádi Bund	3,657
10. Other minor works in the Shikárpur, Western Nára, Hyderabad and Karáchi Canals Districts.	3,834
Total Rs.	1,40,416

The Commissioner will not take up the time of Government by remarking on all of these. His Excellency in Council will, however, be glad to observe that the Pritchard Canal, in spite of the unfortunate erosion at its mouth, was of great use when the river was low early in the season, and the new feeder to the north of it was also of assistance. The Dhamrao is likely to pay excellently. The policy in regard to the Baghiar may require re-consideration. The advantage to the people on the right bank of the Delta, if the Baghiar could be controlled, would be enormous, and money laid out on it should pay well, so it is a question whether a regulator at its mouth should not be undertaken. The people of Sind must acknowledge with gratitude the fact that during the year under report in addition to adding to the staff of engineers Rs. 1,28,153 above the average was spent on new works.

25. The percentage of expenditure to revenue is 34.22. This is below the average as well as that of the previous year.
 *0.72. There is also a decrease in the cost of maintenance per
 †0.77. acre * as compared with last † year, as well as the
 ‡0.76. average‡.

26. The cultivation and revenue of the year under review are compared with those of the past two years in the subjoined table:—

	1892-93.		1891-92.		1890-91.		Increase in 1892-93 as compared with 1891-92.		Decrease in 1892-93 as compared with 1891-92.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
CULTIVATION.										
Government Lands...	2,167,959		1,949,717		1,955,157		218,242			
Jāghir Lands...	231,096		215,914		248,318		15,182			
		2,399,055		2,165,631		2,203,473		233,424		
REVENUE.										
<i>Treated in the Accounts as Indirect Revenue.</i>										
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Consolidated Land and Water Assessment...	57,04,102		51,88,713		50,98,756		5,15,389			
Deduct—Remissions...	2,50,770		1,43,984		67,545		106,809			
Net Consolidated Assessment...	...	54,53,332	...	50,44,749	...	50,30,911	...	4,08,583	...	...
Deduct—Land share...	...	5,45,332	...	5,04,474	...	5,03,096	...	40,823	...	...
Irrigation or water share of net consolidated Assessment...	...	49,08,000	...	45,40,279	...	45,27,815	...	3,67,721	...	...
<i>Accounted for as Direct Receipts.</i>										
Assessment of Jāghir cultivation...	1,29,631		1,17,638		1,33,044		12,113			
Deduct—Remissions...	29,390		10,035		...		10,325			
Isellaneous Receipts (not total)...	...	1,09,291	...	1,07,503	...	1,33,044	...	1,788	...	...
...	...	64,886	...	63,909	...	55,105	...	977	...	...
Total, Direct Receipts...	...	1,74,177	...	1,71,412	...	1,88,149	...	2,785	...	...
Total, Canal Revenue...	...	50,83,177	...	47,11,691	...	47,15,964	...	3,70,466	...	...

It will be seen that there is an increase under all the heads above specified. Of the increase in the net consolidated assessment about Rs. 90,000 are due to the revision of rates in talukas Rohri, Dādu, Shāhdādpur (Hyderabad) and Mirpur Khās. The following table exhibits the distribution of cultivation :—

	Area.			Increase or Decrease as compared with 1891-92.	Revenue.			Increase or Decrease as compared with 1891-92.
	1892-93.	1891-92.	1890-91.		1892-93.	1891-92.	1890-91.	
	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
Government Lands—								
Kharif ...	1,633,041	1,513,533	1,596,939	+ 119,508	39,89,639	38,81,577	41,12,659	+ 1,08,062
Rabi ...	534,918	436,184	358,218	+ 98,734	14,63,693	11,63,172	9,18,252	+ 3,00,521
Total ...	2,167,959	1,949,717	1,955,157	+ 218,242	54,53,332	50,44,749	50,30,911	+ 4,08,583
Jāghir Lands—								
Kharif ...	189,804	177,288	203,341	+ 12,516	88,741	84,453	1,18,506	+ 4,288
Rabi ...	41,292	38,626	44,975	+ 2,666	20,650	23,050	14,538	+ 2,500
Total ...	231,096	215,914	248,316	+ 15,182	1,09,291	1,07,503	1,33,044	+ 1,788
Grand Total—								
Kharif ...	1,822,845	1,690,821	1,800,280	+ 132,024	40,78,380	39,66,030	42,31,165	+ 1,12,350
Rabi ...	576,210	474,810	403,193	+ 101,400	14,84,243	11,86,222	9,32,790	+ 2,95,021
Total ...	2,399,015	2,165,631	2,203,473	+ 233,424	55,62,623	51,52,252	51,63,955	+ 4,10,371

27. The net details of the increase of 2,18,242 in the acreage of cultivation on Government lands will be found in the subjoined table:—

Canal District.	INCREASE.			DECREASE.		
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begāri Canals ...	46,413	...	46,413	...	3,064	3,064
Shikārpur Canals ...	28,983	23,442	52,425	...	...	...
Ghār do. ...	9,563	2,626	12,189	...	...	...
Western Nāra Canals ...	1,283	53,061	54,344	...	...	...
Eastern Nāra do. ...	38,622	...	38,622	...	5,049	5,049
Hyderabad do. ...	3,849	18,137	21,986	...	...	...
Fuleli do. ...	2,649	834	3,483	...	...	...
Karāchi do. ...	...	8,747	8,747	11,854	...	11,854
Total ...	131,362	106,847	238,209	11,854	8,113	19,967
Deduct Decrease ...	11,854	8,113	19,967	...	...	...
Net Increase ...	119,508	98,734	218,242	...	...	...

The Commissioner has already noticed the main factors contributing to this result and need not repeat them. The steady increase in the Ghār Division, which had no special points in its favour or detriment, and in also the Hyderabad Division, which lies high and out of reach of floods, show satisfactorily the general improvement in extension of cultivation going on in Sind. The Fuleli would have shown better but for the breaches and cholera panic.

28. The figures entered in Table II-E exhibit the following result :—

		Gross Revenue.	Working Expenses.	WORKING EXPENSES.	
				Per cent. on gross Revenue.	Per Acre irrigated.
		Rs.	Rs.	Rs.	Rs.
<i>Major Works.</i>					
Begāri Canal District...	Desert Canal ...	1,37,056	1,07,441	78.39	1.13
	Unharwāh ...	43,274	15,679	36.23	0.67
	Begāri Canal ...	3,62,362	72,551	20.02	0.38
Eastern Nāra District ...	Mittrao Canal ...	2,51,591	67,961	27.01	0.56
	Thar Canal ...	91,591	24,518	26.77	0.52
	Eastern Nāra ...	2,39,104	57,796	23.87	0.76
Total ...		*11,24,978	*3,45,226	30.69	0.62
<i>Minor Works.</i>					
Ghār Canal District ...	Sukkur Canal ...	1,29,211	42,163	32.63	0.47
	Ghār Canal ...	6,07,792	1,55,473	25.58	0.61
	Mehrabwāh ...	—5,991	—207	—3.46	—0.02
Hyderabad Canal District.	Alibahar Kacheri ...	3,094	—2,573	—83.16	—0.23
	Marak ...	60,471	34,575	57.01	0.58
	Surfarāz ...	25,834	14,242	55.13	0.48
Fuleli Canal District ...	Fuleli ...	3,57,768	1,48,018	41.37	0.45
Total ...		11,78,179	3,91,691	33.24	0.50
Grand Total ...		23,03,157	7,36,917	32.00	0.55

*The figures given in the Superintending Engineer's returns are—4,82,286, 1,49,556, and they appear wrong.

The figures in this table compare favourably with those in the last year's report. The Superintending Engineer points out that this result is due to more accurate preparation of the figures this year, and that trustworthy comparison of the results may be deferred till next year (*vide* paragraph 35).

29. Table III-E has been constructed this year by canals as suggested. The value per acre deduced from the total estimated value has not been shown under each crop, and this might be done in future, though the estimates cannot pretend to accuracy. The following tables show the value per acre of the principal produce according to the figures in Table III-E, and the crop experiment returns forwarded by Assistant and Deputy Collectors :—

Value per acre according to Return No. III-E.

Crops.	Begāri.	Shikārpur.	Eastern Nāra.	Ghār.	Hyderabad.	Fuleli.	Western Nāra.	Karachi.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Rice ...	18	26	8	29	23	9	19	
Jowāri ...	15	17	11	19	28	9	10	Doubtful.
Bājri ...	8	16	12	16	18	14	8	35
Cotton ...	14	9	63	32	26	48	23	Doubtful.
Wheat ...	19	24	18	39	32	18	11	29
Oil-seeds ...	18	14	6	15	11	10	13	

Value per acre according to crop experiments.

Names of Crops-	Taluka Tuli	Kahnor	Ghotki	Roht	Shikarpur	Sukkur	Nasirabad	Kambar	Lodhrana	Mirpur	Kallar	Hala	Sakraol	Gul	Nasirabad	Shikra	Dadu
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rice	...	...	...	...	...	...	...	34	...	...	...	...	...	...	...	15	...
Jowari	15	...	14	...	...	...	...	...	...	23	...	...	...	...	...	...	...
Wheat	...	28	...	48	57	56	52	60	40	...	46	115	40	...	...	24	38
Oil-seeds	15	...	...	...	...	9	...	41	...	25	70	...	...	9	27, 28 and 24	14	10

Crop experiments are still in their infancy in Sind, but with time and patience trustworthy figures of outturn and value may be obtained. The second factor, however, varies greatly. Wheat fetches at the time of writing these remarks little more than half the price that it did a year ago.

The great fluctuation in the acreage of crops to be observed in Sind, due to the varied quality of the inundation no less than in price, is one reason (though there are many others) why, as is sometimes suggested, zamindars cannot be tied down at the beginning of the season to the cultivation of a particular crop on a particular area of their holding with a view to ensure a more scientific and economical distribution of the water.

This may be illustrated by deductions from Table VIII.

Rice cultivation compares with the 3 years' average and with the preceding year as under:—

Canals.		Average.	1891-92.	1892-93.
		Acres.	Acres.	Acres.
Sind Canal	...	21,300	22,974	21,935
Mittrao	...	54,906	53,182	58,370
Thar Canal	...	25,068	22,316	28,984
Sukkur	...	27,079	26,894	26,869
Ghar	...	98,876	132,542	123,320
Fuleli	...	128,743	127,702	123,633
Western Nara	...	71,657	63,078	58,921
Pinyari	...	61,768	59,569	60,246
Total for the Province		595,540	620,492	592,456

i. e., there were 28,036 acres less rice this year than last. The following canals produce cotton:—

	Acres.
Mittrao	9,449
Great Marak	8,674
Gharo Mahmuda	10,193
Fuleli	11,766

The area under cotton is compared as under;—

Canals.		Average	1891-92.	1892-93.
		Acres.	Acres.	Acres.
Mittrao	...	11,362	13,134	9,449
Great Marak	...	11,966	10,522	8,674
Gharo Mahmuda	...	13,924	14,110	10,193
Fuleli	...	11,505	13,688	11,766
Total for the Province		78,663	82,098	55,647

There were thus 26,451 acres less of cotton cultivation, in fact about one-third less.

These figures demonstrate the extent to which rice and cotton crops are affected by a low inundation in the beginning of the season.

Wheat and oil-seeds were much more extensively sown than usual as shown by the following figures:—

Canals.	Average.		1891-92.		1892-93.	
	Wheat.	Oil-seeds.	Wheat.	Oil-seeds.	Wheat.	Oil-seeds.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Begari Canals	1,979	6,213	10,619	30,800	4,447	30,185
Rohri do.	15,117	1,089	34,012	756	56,567	2,797
Sind do.	5,598	1,063	12,909	512	10,234	637
Nara Supply Channel	3,858	752	3,114	55	9,532	601
Eastern Nara	9,215	21,286	6,810	6,946	5,752	10,941
Mitrao Canal	15,004	5,110	24,674	4,436	18,109	3,624
Sukkur do.	91,020	3,313	30,551	5,547	25,253	2,945
Ghar do.	24,385	14,278	41,028	12,374	39,939	21,186
Fuleli do.	7,106	17,172	11,316	19,722	15,459	16,507
Western Nara	32,569	7,781	42,791	13,524	69,492	30,634
Total for the Province ...	164,524	99,872	271,670	120,550	301,909	175,736

Roughly put, the area under wheat and oil-seeds was about double the average under each. This is the result of high inundation and floods, stimulated of course by the hope of good prices.

30. The Commissioner will now briefly re-capitulate the principal features noticeable in the working of the main canals during the year.

The Desert Canal worked better this year than in the previous year. Had the inundation not been poor in the beginning of the season and a flood from the hills not injuriously affected the new mouth the result would have been still better.

	Average for 3 years ending 1889-90.	1890-91.	1891-92.	1892-93.
Total Acres ...	96,947	124,919	60,110	95,156

The Begari worked satisfactorily as usual as the following figures will show:—

				Average, 1889-90.	1890-91.	1891-92.	1892-93.	
				Acres.	Acres.	Acres.	Acres.	
Government lands—								
Kharif	...	...	...	134,705	102,629	108,929	124,541	
Rabi	...	...	...	8,972	15,609	37,497	35,309	
Total				...	143,677	118,238	146,426	159,850
Jágghir Lands				...	37,254	25,815	28,293	32,674
Total				...	180,931	144,053	174,719	192,524
Revenue—								
Kharif	...	...	...	292,337	221,860	239,450	273,663	
Rabi	...	...	...	27,727	44,539	100,158	88,844	
Total				...	320,064	266,399	339,608	362,507

				Average, 1889-90.	1890-91.	1891-92.	1892-93.
				Acres.	Acres.	Acres.	Acres.
Remissions —							
Khariff	...	...		5,272	3,379	23,658	1,044
Rabi	...	...		12,566	3,674	12,839	10,791
Total	...	...		17,838	7,053	36,497	11,835
Net consolidated Revenue	...	...		302,225	259,346	303,111	350,672
Water-share	...	...		272,003	233,411	272,799	315,605
Hakabo...	...	...		39,725	28,041	14,129	28,610
Miscellaneous	...	...		443	314	225	1,000
Total	...	...		312,171	261,766	287,153	345,215

The falling off of cultivation in Kelát has already been alluded to. The Commissioner believes that a special clearance, costing some half a lák of rupees, towards the tail of the Begári Canal, would be most valuable both for the Edenwáh and also for the Kelát people. But a separate canal would be far better for the latter, if feasible.

The Unarwáh and the Desert Canal were shown last year to have worked at a loss. This year the deficit on both the canals has been converted into a profit of Rs. 31,683 and Rs. 20,833 respectively (*vide* table under para. 30 of the Superintending Engineer's report). The year is memorable for the first breach in the great Káshmor Bund since 1878. Six bad leaks occurred, but by a timely exercise of energy only one led to a breach and that was just before the fall in the river, so little damage was done.

The Sindwáh maintained its cultivation and revenue to the level of last year as will be seen from the following figures. The project for extending this canal has been sanctioned, and though it is not safe to prophesy the Commissioner believes that five years hence the Government will look back with great satisfaction to the profit that this outlay has assured them. He hopes the capital cost will be repaid to them :—

				Average.	1890-91.	1891-92.	1892-93.
Total Acres	...	...		59,352	66,527	67,825	67,677
				Rs.	Rs.	Rs.	Rs.
Total Revenue	...	...		1,55,226	1,79,323	1,87,916	1,87,117

It will be noticed that the season was very favourable in this district. The canals were properly cleared and opened in good time. With the exception of the Aror and Umarkas which are out of the line of floods and which worked satisfactorily, all the rest were badly damaged by floods. But the floods did a great deal of good in this district, as the following figures taken from Table III will show :—

				Average 3 years ending 1889-90.	1890-91.	1891-92.	1892-93.
Total Acres	...	...		81,671	66,762	77,684	131,979
				Rs.	Rs.	Rs.	Rs.
Total Revenue	...	...		1,94,225	1,66,871	2,06,212	3,47,883

The Sukkur-Begári Bund stood firm, though it was severely tried by the inundation of 1892. The front slope of the bund has been gradually increased from 2 to 4 to 11 and the last 3 miles of this work were completed before the inundation. The bund is now in most excellent order. Erosion continued opposite the 33rd and 20th mile, but the danger at the 10th mile, which was a cause of great anxiety, has decreased.

The total canal revenue, Rs. 5,07,890, is the highest for this district for the series of five years.

There were no floods in this district, but the rainfall was more than usual.

In July it was useful; but in August the river was so high that more water was not needed, and as the private Karias had to be closed, breaches in canal banks occurred in many places. On the whole this district fared well as its canal revenue, Rs. 9,56,775, is the highest in the series of five years including 1891-92, which itself stood as the highest in the series of five years commencing from 1887-88. The experiment tried in the previous year in opening the old head of the Sukkur Canal had to be tried again in the year under report when the river was very low in the beginning of the season, and it gave satisfactory results:—

		Average.	1890-91.	1891-92.	1892-93.
		Acres.	Acres.	Acres.	Acres.
Sukkur Canal—	Total ...	82,166	66,527	89,343	88,758
		Rs.	Rs.	Rs.	Rs.
Revenue—	Total ...	1,93,191	1,79,323	2,20,677	2,17,699
		Acres.	Acres.	Acres.	Acres.
Ghár Canals—	Total ...	204,567	253,114	239,369	255,553
		Rs.	Rs.	Rs.	Rs.
Revenue—	Total ...	5,67,690	7,12,364	7,19,464	7,40,561

The Western Nára is the most important canal in the district named after it. The low river in June and first half of July delayed rice sowing and transplautation, but afterwards up to 21st September the supply was ample and the kharif crops on the main canal are reported to have been excellent. The high land situated in the immediate vicinity of the canal was cultivated for the first time for many years, but the cultivation on the branch canals was seriously injured by floods from the river and from the hills. Yet these same floods from the hills had an excellent effect in scouring the Nára in places where, as the Commissioner noticed in his tour, the bed was so silted and choked that it really looked as if clearance on a gigantic scale would be needed. Since the report was written the river has continued to erode the mouth of the Pritchard Canal and has approached the head regulator so closely that the building of a new one has been proposed. The revenue from the Nára was as under:—

		Acres.	Revenue.
			Rs.
1891-92	...	206,938	5,55,043
1892-93	...	239,279	5,90,231

The revenue from the Manchhar Lake, which was filled to an unprecedented extent, is as under as compared with the previous year:—

		Acres.	Revenue.
			Rs.
1891-92	...	8,987	20,406
1892-93	...	17,250	33,021

If the erosion that is going on at Karampur would continue but a small distance further, the river would again come to Sehwan and the Manchar revenue would rise above a lākh of rupees at once.

The canals in this system worked satisfactorily. A miniature flood again came down the Nára and was on the whole beneficial. The rainfall which was greater than usual was beneficial to the kharif crops and helped in the spontaneous growth of grass on high lands. Silty water reached the Khipra Canal for the first time in the early part of the season. This is attributed to the clearance effected between Jatri and Ketī. The silt, however, disappeared directly the flood water entered the canal. The Commissioner hopes next year to hear of silty water reaching the Thar Canal also. The bunds closing the Adhwani and Sao Nára, the two principal escapes of the Nára to the east between Jamrao and the head of the Mitrao, were severely tried, but safely stood 11·20 feet of water or 1·2 feet more than they were supposed to retain. The results of the re-construction of the bund from Bakhora to Bakkar have not been alluded to, but as the Makhi Bund had to be cut, no doubt the water was also passed through the new bund which was only meant to keep water out of the unprotected area in normal years. Several breaches occurred in the Nára below Bakkar and three more were made purposely to allow flood water to escape into Dhands in the Desert on the east. The total revenue collections in this district amounted to Rs. 4,83,807 against Rs. 4,38,459 in the previous year. Thus the collections in 1892-93 exceeded those of 1888-89, 1890-91 and 1891-92 but were less than those in 1889-90 by Rs. 15,143.

31. The Superintending Engineer alludes to a deficiency at the tail of the Mitrao owing to waste in the upper reaches and, the Commissioner will take counsel with him as to the best way of preventing this.

The lowness of the inundation in June and July retarded cultivation in this district. Later on the supply was excellent and well maintained and cultivation made rapid progress, being assisted by timely rainfall. On the whole the total revenue (Rs. 8,43,460) collected in this district was the largest in the series of five years. There was an increase of F 64,817 as compared with the previous year, but of this about Rs. 38,000 are due to the enhancement of rates in talukas Shahdādpur and Mirpur Khās. When Government recollect the long list of canals in this division on which, owing to want of water, the Executive Engineer has prohibited the giving out of more land (*vide* Commissioner's letter

* *Vide* Public Works Department memorandum No. 450—1, dated 27th June 1893, transferring correspondence to the Revenue Department.

No. 726*, Revenue Department, of 23rd February 1893) the room which this division presents for improvement will be easily recognised. The Commissioner is glad to learn that the projects for which his predecessors, Sir Charles Pritchard and the Honourable Mr. Trevor, were so desirous, the Naolakhī, Dad and Nasrat, will soon be in the hands of Government. The singular and unprecedented flood, which spilled over the left bank north of the city of Hyderabad, cutting off communication between the town and river, is specially noticeable in this report.

The following figures exhibit the area and revenue of this district as compared with the three years' average ending 1889-90 and with the past two years:—

		Average.	1890-91.	1891-92.	1892-93.
		Acres.	Acres.	Acres.	Acres.
Total Area	...	295,657	332,765	324,935	331,974
		Rs.	Rs.	Rs.	Rs.
Total Revenue	...	5,46,472	6,16,684	5,99,376	6,03,133

The little beginning, for it is nothing more, made in draining the tails of the Fuleli has not yet been much felt and nothing should interfere to prevent the

steady extension of these drains. The new Alipur regulator will be of great value in irrigating high lands.

The season was the most unfortunate for this district. There was want of water in the beginning and later on most of it was swept by floods. Consequently the revenue collections, which stood last year at Rs. 4,38,245, fell to Rs. 3,30,209 and compare unfavourably with the five years' series. The percentage of total charges on the revenue increased from 69.17 to 81.36. The figures for the principal canals in this district compare as under:—

		Average.	1890-91.	1891-92.	1892-93.
Pinyári	{ Total Acres ...	72,131	70,226	68,214	72,562
	{ Total Revenue ...	1,68,096	1,66,315	1,60,592	1,25,440
Kalri	{ Total Acres ...	10,689	12,138	13,116	12,052
	{ Total Revenue ...	23,254	26,819	28,256	21,511
Baghiar	{ Total Acres ...	20,920	26,063	27,239	26,303
	{ Total Revenue ...	39,797	53,085	54,613	48,314

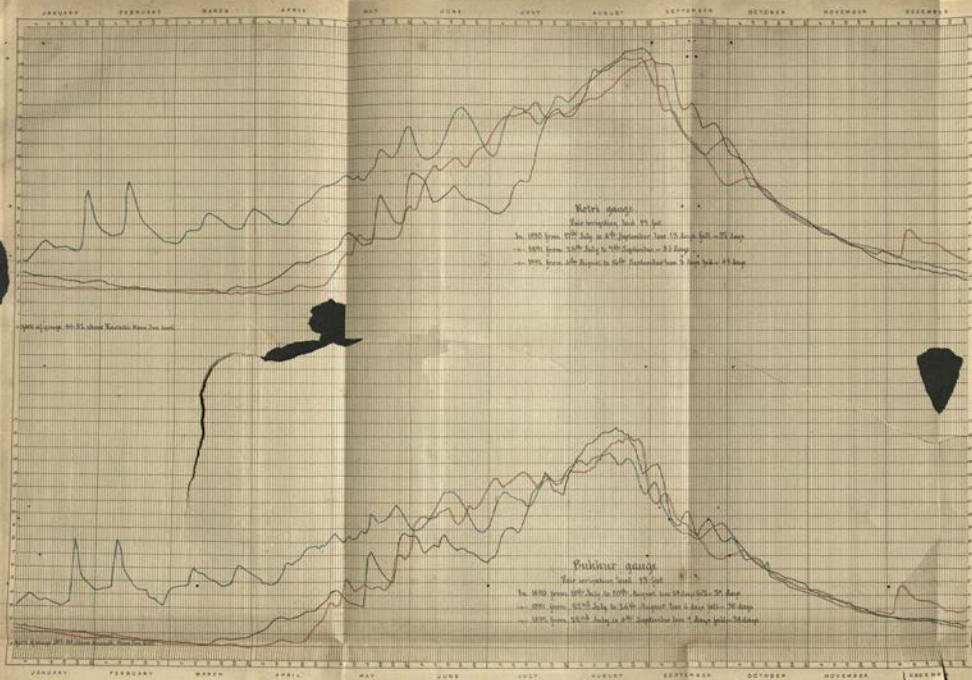
32. The new Forms I to III-E and I-A have been forwarded, the latter for the first time this year. In Return No. III-E the Kelát figures have been entered in red ink in this office as requested by Mr. Thompson in his No. 5284, dated 28th December 1893. Mr. Thompson points out that the figures entered in Form I-A are not yet quite complete.

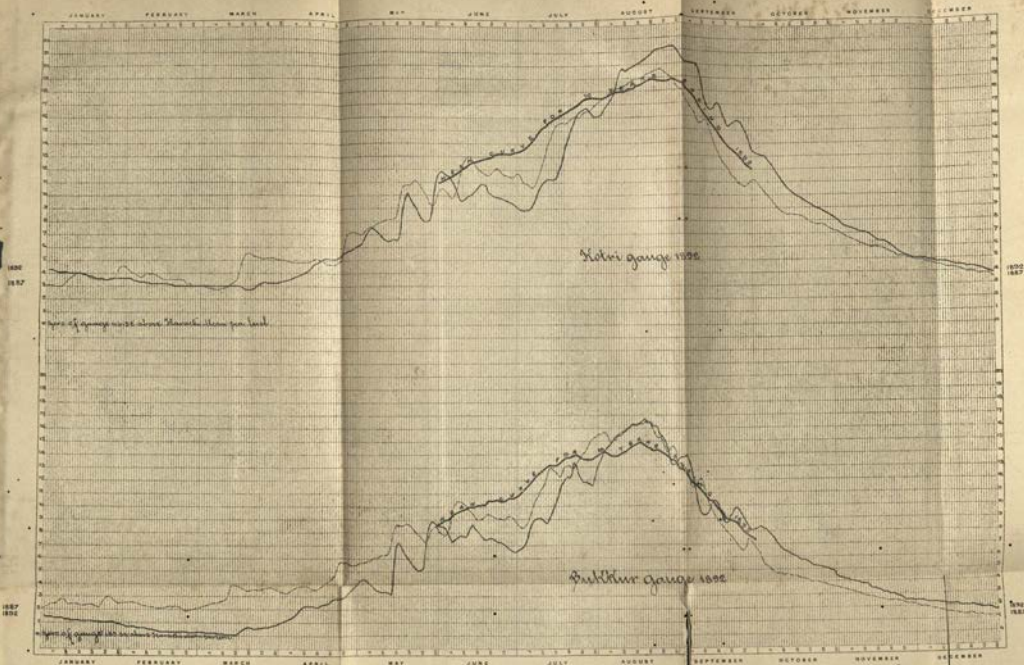
33. The report has been received a little late, having reached the Commissioner on the 5th January 1894, and no time has been lost in disposing of it.

It is the last report which Mr. Thompson will sign as a sole Superintending Engineer in Sind, and the Commissioner takes the first opportunity of expressing personally his great gratification that the Government of India and the Secretary of State have seen the wisdom of relieving Mr. Thompson of the overwhelming labour, which only his ability and the good fortune that he was intimately acquainted with Sind enabled him to carry through for several years cheerfully and manfully and with the best results. This is perhaps not the place to discuss how the next report should be written, as Government have approved of the senior Superintending Engineer writing it, on data supplied from both banks. But the Commissioner is inclined now to think that it would be better for each Superintending Engineer to prepare his own.

34. The Commissioner would in conclusion only beg to be allowed to record his own unqualified opinion as to the success of Mr. Thompson's administration and his belief that under officers like himself and Mr. Doig, the Government will see still greater annual advances than this year records. Mr. James was not prepared, knowing the demoralisation caused by epidemics, and the ruinous effects of the floods in Lower Sind, to find such good results for the year under report, and he thinks he is justified in quoting this as a basis for further expenditure on the development, step by step, of irrigational facilities in Sind. The province does indeed owe much to the liberal policy that has of late been initiated, and the continuance of which will be beneficial to the State and people alike. The Commissioner would also beg to add his own testimony to the excellent work done by all the officers mentioned in Mr. Thompson's 37th paragraph. The ungrudging spirit with which they address themselves to remedying difficulties often in most trying circumstances, the thorough cordiality exhibited in working with other departments and their success in enlisting the aid of the Zamindárs and people, speak even better for them than the mere figures of revenue which Government owes in great measure to their exertions, but which may fluctuate from year to year from causes beyond their control.

H. E. M. JAMES,
Commissioner in Sind.





W. H. Brown
 16. Dec. 1887
 Superintendent Engineer
 Public Works Department



References.

- Land under Revision Settlement. ——— Red.
 Land under Irrigational Settlement. ——— Blue.
 Land for which Irrigational Settlement proposals
 have been submitted but not yet sanctioned. } Yellow
 Land in the Thar and Parkar District measured
 but not settled by Settlement Department. ——— Green.

J. Seymour
 Acting Superintendent Sind. Revis.



*Revenue Report of Irrigation Works in Sind for
1892-93—Review of the.*

No. 62 W. I.—724 of 1894.

Public Works Department.

Bombay Castle,
26th April 1894.

Letter from the Superintending Engineer, Indus Left Bank Division, No. 5779, dated 30th December 1893.

Submits the revenue report of irrigation works in Sind for 1892-93 with statements, maps and charts.

Memorandum from the Commissioner in Sind, No. 225, dated 25th January 1894.

Forwards the above with remarks.

RESOLUTION.—The inundation of 1892 is described as ‘peculiar.’ During the months of June and July the gauges at Bukkur and Kotri registered much below mean height, while in August and September the readings were considerably higher. The curve of the inundation of 1892 resembles, in a marked degree, that of the inundation of 1887, which was described as “very poor, somewhat irregular and deficient.” Looking to the results, however, the season under review must be characterized as ‘good’. The inundation was unfavourable for the kharif crops, which require water in June and July, and especially so for cotton and rice; but the high level reached in August, and maintained well into September, gave an excellent supply for rabi. The maximum reading at Bukkur was 16’ 9”, and was reached on the 18th August, i. e., on the same date as in 1887, in which year the maximum was only 2 inches lower. At the Kotri gauge the highest reading yet recorded was reached on the 27th August. The Superintending Engineer notes that the Indus took nearly three times as long in 1892 to discharge a flood of nearly the same volume as in 1887 and with an increase in level of 21”, but adds that since 1887 there has been no extension of embankments in Upper Sind. The question of embankments in Sind and their effect on the rise of the level of the river has been dealt with in Government Resolution No. 156 W. I.—1800, dated 15th November 1892. The difficulty of forming any definite conclusions in the matter is made clear there. Perhaps it may be possible to trace the causes of this phenomenon with greater accuracy after the results of the survey of the river and its mouths are recorded, but it may be remarked that the exceptional rainfall of the year, particularly in Lower Sind, may afford a partial explanation, that recorded in 1887-88 having been generally only about one-third of that gauged in the year under review.

It is stated that in a perfect inundation the curve of the Indus should read over 13’ at Bukkur and over 17’ at Kotri for about ten weeks from 25th June. According to this test, the river in 1889 was almost perfect, and would have been quite so had the maximum height been reached a week later. During the next three years there is a marked falling off in the supply of water, and the results show that irrigation in Sind is gradually becoming less dependent on the character of the inundation.

The rainfall was unusually heavy. It caused floods, doing great injury to cultivation and canal banks in the Western Nara District and also in some portions of the Karachi District: in other places it was beneficial. The heaviest fall occurred in the end of July and the beginning of August, and was of great assistance to the cultivators in securing the kharif crop.

Floods did considerable damage in the year under report. The Kashmir bund was breached. The local Rohri floods joined by a moderate one from Bhawalpur entered the Nara supply channel and the Nara valley, breaching some of the canal bunds. The line of river embankments in the Western Nara District was breached in several places. The city of Hyderabad was completely cut off from the river by a flood which for the first time overflowed the river bank south of the Fuleli, doing no injury to cultivation, but damaging considerably some

public buildings, roads and the Umarkot Railway. In the Karáchi District the river embankments were breached and overtopped in many places, and almost all Sháhbandar was under water; also a large area of Jhárik sub-division was flooded from the river and rain. The only districts that escaped were the Shikárpur, Ghár and Hyderabad canals. In the Western Nára and Karáchi districts the cultivation suffered much, and the remissions are heavy. In the former the loss has been more than recouped by the excellent barani crops grown on land under the hills depending entirely on rain water.

With some few and unimportant exceptions, all canals are reported to have worked well, and to have distributed the supply available without any serious complaints. During the previous year, the Desert Canal had failed, and the Pritchard Canal had suffered from erosion at its mouth. During the year under report, however, the new mouth of the Desert Canal worked well, though somewhat damaged by the passage of rain floods; erosion continued at the mouth of the Pritchard Canal, and eventually a new head regulator has had to be constructed. As in the previous year, the Pritchard Canal was closed for the greater part of the season. The new feeder was opened for the first time, but was closed almost immediately.

2. The mileage of canals and river embankments was 5,688 and 661 as compared with 5,863 and 659 in the previous year. The division between main and branch canals has been more accurately shown this year. The total mileage of canals has increased by twenty miles and that of embankments by two. The increase under canals is attributable to the resumption of the Karowah in the Karáchi District, the taking over of the Mitnawah in the Fuleli District, and the addition of two miles to the Desert Canal. The increase under embankments is the net result of additions in the Eastern Nára and Karáchi districts and erosion in the Western Nára District.

In the Begári, Shikárpur and Ghár districts, the river embankments are reported to be in good order and of sufficient section. In the Western Nára the embankments are very old, and much has not yet been done to bring them up to required strength. In the Karáchi District, the greatest danger is said to be from the large number of water-courses which pass through the bunds. The Superintending Engineer remarks that the earth-work has been yearly increased, and keeps fairly up to the increase of water-level, but the sluices are more difficult to deal with, and that a final settlement as to their number and construction is greatly to be desired. The Commissioner admits that the number of small karia heads in the delta bunds is an evil, but he thinks that, in time, the substitution of masonry heads will remove this source of danger. The question raised by Mr. Thompson is very important, and should form the subject of a separate report.

3. The table in paragraph 26 of the Commissioner's review shows that as compared with 1891-92 the area of cultivation rose from 2,165,631 acres to 2,399,055 acres, showing an increase of 233,424 acres,* or more than 10 per cent. Compared with the area for 1890-91 the area of the year under report shows an increase of 195,582 acres. The total canal revenue rose from Rs. 47,11,691 to Rs. 50,82,177, or nearly 8 per cent. In the table in paragraph 13 of the Commissioner's review of previous year's report, the total canal revenue for 1891-92 was shown as Rs. 46,73,853, while in the corresponding table in paragraph 26 of his present review the revenue is shown as Rs. 47,11,691. This difference has not been explained, but it appears to be due to inclusion of assessment (Rs. 37,838) on unauthorized cultivation.

Area of cultivation.			
*	Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.
1891-92.			
Government lands...	1,513,533	456,184	1,969,717
Electric "...	59,891	30,831	90,722
Jaghir "...	137,397	27,796	165,193
Total	1,690,821	514,810	2,165,631
1892-93.			
Government lands...	1,633,011	524,018	2,157,029
Kheht "...	14,010	9,504	23,514
Jaghir "...	135,794	31,788	167,582
Total	1,822,815	576,310	2,399,066
Difference.			
Government lands...	+119,808	+68,734	+218,542
Kheht "...	+14,119	-1,282	+12,837
Jaghir "...	-1,593	+4,550	+2,957
∴ Total	+132,024	+101,600	+233,424

4. The total increase in area is made up of 132,024 acres under kharif and 101,400 acres under rabi, and is distributed under the several classes of works as follows:—

			Kharif. Acres.	Rabi. Acres.
Major Works ...	...	...	101,360	—13,074
Minor Works —				
Capital ...	...	...	17,486	10,507
Revenue ...	...	...	13,165	104,603
Agricultural	...	...	13	—636
Total ...			<u>132,024</u>	<u>101,400</u>

Under kharif the increase is most remarkable in the case of Major Works, and is further distributed as follows:—

			Increase, Acres.
Government lands ...	...	...	85,022
Khelát " ...	...	...	14,119
Jághir " ...	...	...	2,219
Total ...			<u>101,360</u>

The above figures show that the increase is mainly on Government lands. In reviewing the report for 1891-92 it was observed that compared with 1890-91 the decrease was most considerable under Major Works and on Government lands, due to the failure of the Desert Canal. This year the Government lands show a very satisfactory increase not only in comparison with the figures for 1891-92, but also with those for 1890-91. The increase under kharif is distributed by districts as follows:—

			Increase, Acres.
Begári Canals ...	...	...	61,075
Shikárpur " ...	...	...	31,207
Ghár " ...	...	...	11,955
Western Nára " ...	...	...	—2,078
Eastern Nára " ...	...	...	40,298
Hyderabad " ...	...	...	458
Fuleli " ...	...	...	1,750
Karáchi " ...	...	...	—12,641
Total ...			<u>132,024</u>

5. The increase under rabi is most marked under Works for which only Revenue Accounts are kept, Major and Agricultural Works showing decreases. The increase is almost solely on the Government lands, under which it is 98,734 acres, Khelát lands showing a small decrease of 1,327 acres, and jághir lands a slight increase of 3,993 acres. Distributed by districts the result is as follows:—

			Increase, Acres.
Begári Canals ...	...	...	—4,873
Shikárpur " ...	...	...	22,940
Ghár " ...	...	...	3,644
Western Nára " ...	...	...	57,485
Eastern Nára " ...	...	...	—8,837
Hyderabad " ...	...	...	18,336
Fuleli " ...	...	...	3,942
Karáchi " ...	...	...	8,813
Total ...			<u>101,400</u>

The attention of the Superintending Engineer is drawn to the remarks of the Commissioner regarding the causes of the decrease in the case of Eastern Nára.

6. The figures of area of cultivation and revenue for 1892-93, given in paragraph 3 above, are distributed as follows:—

Distribution of area of cultivation and of revenue

			Area. Acres.	Revenue. Rs.
Major Works	...	...	554,369	9,89,667
Minor Works—				
Capital	...	...	787,064	17,66,663
Revenue	...	...	1,054,528	23,19,486
Agricultural	...	...	3,094	6,361
Total	...	...	2,399,055	50,82,177

The corresponding figures for 1891-92 are :—

			Area. Acres.	Revenue. Rs.
Major Works	...	...	466,083	7,87,998
Minor Works—				
Capital...	...	...	759,071	17,16,812
Revenue	...	...	936,760	21,62,028
Agriculture	...	...	3,717	7,015
Total	...	...	2,165,631	46,73,853

These figures are taken from the report for 1891-92. The figures of revenue for the same year given in the report for 1892-93 show an increase of Rs. 37,838, which, as already observed in paragraph 3 above, is due to inclusion of assessment on unauthorized cultivation.

The figures above given show that the Major Works account for an increase of 88,286 acres of area of cultivation, and Works for which only Revenue Accounts are kept an increase of 117,768 acres, the corresponding increase in revenue being Rs. 2,01,669 and Rs. 1,57,458.

7. The Superintending Engineer observes that the total area irrigated in 1892-93 is the largest yet recorded for Sind, exceeding the average of five previous years by 257,321 acres, the area of the previous year by 233,424 acres, and that of 1837-88, a year of similar inundation, by 527,941 acres. The kharif crop shows a fair increase of 38,999 over the average, and exceeds that of the previous year by 132,024 acres, but falls short of that for 1889-90 by 113,785 acres. The inundation of 1889 was the most favourable of all for kharif, while that of 1892 was poor, and perhaps worse than that of 1887, and yet the crop produced was larger by 185,780 acres. The rabi crop of the year is the largest on record, exceeding the average by 218,322 and that of 1891-92, the next best year, by 101,400 acres, while it is more than double the crop for 1887. These results are accounted for by the continued low level of the river in the early part of the season, which rendered it necessary for land prepared for kharif to be sown with rabi, as water was not available in time for the former crop, and more especially was this the case on all the smaller canals, many of which practically received no kharif supply at all. Under canals classed as Minor Works for which Capital Accounts are kept, the kharif crop was the largest ever grown, which, the Superintending Engineer observes, is a remarkable result in this inundation, partly due to small improvements in the Hyderabad Canals and to the free use made of the old head of the Sukkur Canal during June and July.

Mr. Thompson remarks that under the head Major Works the kharif shows the worst outturn. This remark is not understood, as it appears from Statement A-3 that the area for 1892-93 exceeds the average by 12,783 acres and that of the previous year by 101,360 acres.

Under all Minor Works the rabi crop was excellent, and under Works for which only Revenue Accounts are kept it was extraordinary.

The Commissioner remarks that these results demonstrate that the distributory canals in Sind, under the able and judicious guidance of the Superintending Engineer, aided by a capable staff, were able to maintain steadily the area under kharif cultivation in an inundation unfavourable to that species of cultivation, and to show remarkably good results under rabi, the extensive growth of which was rendered possible on high lands situated on the smaller canals by a late and high inundation. This is highly satisfactory.

Distribution of cultivation in jaghir lands.

8. The details of cultivation in jaghir lands are as follows :—

Kharif.

<i>Foreign Jágírh.</i>	1892-93.	1891-92.	Difference.
	Acres.	Acres.	Acres.
Khelát lands	54,010	39,891	+14,119
<i>British Jágírh.</i>			
Upper Sind Frontier	782	743	+39
Shikárpur	28,218	22,673	+5,545
Thar and Párkar	3,350	1,838	+1,512
Hyderabad	94,894	99,184	-4,290
Karáchi	8,550	12,959	-4,409
Total ...	135,794	137,397	-1,603
Grand Total ...	189,804	177,288	+12,516

Rabi.

<i>Foreign Jágírh.</i>			
Khelát lands	9,504	10,831	-1,327
<i>British Jágírh.</i>			
Upper Sind Frontier	60	198	-138
Shikárpur	11,666	12,853	-1,187
Thar and Párkar	179	546	-367
Hyderabad	11,122	7,815	+3,307
Karáchi	8,761	6,383	+2,378
Total ...	31,788	27,795	+3,993
Grand Total ...	41,292	38,626	+2,666

It is apparent from the above tables that under kharif the lands in Khelát and Shikárpur, and under rabi the Hyderabad and Karáchi jágírh lands, exhibit an increase: the remaining districts show decreases, the most noticeable of which are those in the case of Hyderabad (kharif) and Karáchi (kharif). The decrease under kharif is said to be entirely due to the late supply in the smaller canals. The Major Works show a large decrease under rabi which is accounted for by a more accurate distinction between canal and spill-water cultivation. The excess under kharif, in the case of foreign jágírh lands, is attributed to the better working of the Desert Canal.

During the year under report, a jágírh of 1,000 acres on the Desert Canal reverted to Government, and a new one of like area was granted on the Eastern Nára. In the Hyderabad and Fuleli districts, 19 jágírh of an aggregate area of 2,750 acres lapsed, and came under Government control.

Areas cultivated by districts, and percentage of kharif cultivated and the percentage of kharif and rabi in the several districts;—

Canal District.	GOVERNMENT LANDS.			J'AGHIR LANDS.			TOTAL.			PERCENTAGE.	
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.	Kharif.	Rabi.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	...	...
Begári Canals ...	195,494	49,059	244,552	59,480	10,010	69,490	254,971	69,077	314,051	81	19
Shikárpur ...	112,851	75,098	187,949	8,414	3,293	11,707	221,285	78,391	199,556	60	40
Western Nára ...	237,800	65,708	303,508	9,503	3,179	12,682	247,423	96,888	344,311	71	29
Eastern Nára ...	164,158	136,789	300,947	8,087	9,601	18,678	172,245	146,780	319,025	54	46
Hyderabad ...	181,459	37,050	218,508	3,324	1,369	4,693	184,983	58,429	243,412	76	24
Fuleli ...	333,761	50,767	384,528	45,496	2,976	48,472	379,359	53,145	432,504	88	12
Karáchi ...	246,853	44,471	291,324	49,396	8,744	58,140	288,219	53,215	341,434	85	15
Total ...	1,583,041	27,957	1,610,998	6,842	2,322	9,164	1,644,447	70,285	1,714,732	84	16
Percentage ...	75	25	100	82	18	100	76	24	100	...	...

The percentage of kharif is the largest in the Hyderabad District; that of rabi is the largest in the Western Nára and Shikárpur Canals District.

10. A crop return, with an abstract like that of last year, has been submitted for five years ending 1892-93. A separate statement for 1892-93 only, for Government, foreign and jághir lands, has also been submitted.

11. The following statement shows the proportion of flow to lift cultivation on Government land for each canal district for the year 1892-93:—

Canal Districts,	Lift.	Flow.	Total.	PERCENTAGE.		
				Lift.	Flow.	Total.
	Acres.	Acres.	Acres.			
Begári Canals	23,908	229,944	253,852	9	91	100
Shikárpur "	32,246	156,355	188,601	17	83	100
Ghár "	21,738	313,721	335,459	6	94	100
Western Nára "	77,173	237,414	314,587	25	75	100
Eastern Nára "	56,913	189,032	245,945	24	76	100
Hyderabad "	313,972	74,979	388,951	81	19	100
Fuleli "	97,773	203,367	301,140	32	68	100
Karáchi "	35,454	166,969	202,423	18	82	100
Total, Acres	659,177	1,571,781	2,230,958	30	70	100

The percentages remain nearly the same as last year. In the Hyderabad District more than four-fifths of the area cultivated is irrigated by lift, while in all other districts a large proportion is watered by flow, the highest proportion of flow irrigation being in the Ghár Canals and the lowest (excepting the Hyderabad Canals) in the Fuleli Canals.

The figures for all lands, including the foreign and jághir cultivation, are as follows:—

Canal Districts.	Lift.	Flow.	Total.	PERCENTAGE.		
				Lift.	Flow.	Total.
	Acres.	Acres.	Acres.			
Begári Canals	37,326	286,025	323,351	11	89	100
Shikárpur "	34,184	166,124	200,308	17	83	100
Ghár "	22,249	325,952	348,201	6	94	100
Western Nára "	80,860	251,805	332,665	24	76	100
Eastern Nára "	57,097	193,732	250,829	23	77	100
Hyderabad "	356,396	79,951	436,327	81	19	100
Fuleli "	120,036	239,244	359,280	33	67	100
Karáchi "	36,892	173,701	210,593	17	83	100
Total	745,540	1,716,514	2,462,054	30	70	100

The percentages are nearly the same as in the case of Government lands only.

Last year Government again requested the attention of the Commissioner in Sind to the feasibility of distinguishing 'flood' and 'spill' irrigation from 'flow.' Accordingly, in the crop returns furnished by the Revenue Department for the year under report, there is a new column "Spill except from Government canals." Mr. James remarks on the surprising result which this arrangement has produced in the case of the Deharwah; but, as observed by him, it is an exceptional case, and Government agree with him in thinking that too great a refinement in this matter is to be deprecated.

12 As in the previous year, the Superintending Engineer has furnished, in the body of his report, a statement showing the areas of the principal crops irrigated in 1892-93 and the percentages of kharif and rabi, flow and lift. There is an improvement upon last year's statement in so far as the percentages are shown for five years instead of for one year only. Mr. Thompson has also added a statement showing the area under each crop on Government land for 'flow' and 'lift' for five years ending 1892-93. The area shown in these statements and in those appearing in paragraph 11 above does not correspond with that shown in the other tables accompanying the report, and the difference is explained by the Superintending Engineer as being due to inclusion of 'Dubári' and unauthorized cultivation. In the foot-note, however, in which this explanation is furnished, the Superintending Engineer quotes the area of regular cultivation as 2,167,782, while the figure appearing in Tables III and VII and other places is 2,167,959. The difference, 177 acres, is explained in the remark at the end of Table VIII-A, as due to deduction of forest cultivation in the Karáchi District, the details of which have not been received.

As observed in previous years, the kharif is the principal crop grown in Sind, the percentage for 1892-93 being 73.

Rice is the staple crop in the Ghár, Eastern Nára, Fuleli and Karáchi districts, jowári in the Begári, Shikárpur, and Western Nára districts, and bájri in the Hyderabad Canals. More than half the cotton is grown in the Hyderabad District and a fair area in the Eastern Nára and Fuleli. Wheat is chiefly grown in the Shikárpur, Ghár and Western Nára canals, and oil-seeds in the Begári and Western Nára.

13. In the body of the report the Superintending Engineer has given a statement comparing the areas of different crops with those of the previous year under Government as well as jágírh lands. From this it appears that, in the case of Government lands, under kharif, jowári and bájri areas only have increased, while under rabi all kinds of crops have improved, the greatest improvement being under wheat and oil-seeds. In the case of jágírh lands, all crops show a decrease, with the exception of rice, jowári and bájri. The area under "other crops," however, shows an increase of 10,021 acres.

14. The total area of Dubári cultivation, in the year under report, was 228,504 acres against 227,147 of the previous year. The figure for 1891-92 given in last year's report was 219,768, exclusive of 7,379 for Hyderabad, information for which was not available when the report was submitted. The totals in columns 2 and 4 of the statement in paragraph 10 of the Superintending Engineer's report for 1892-93 are not correct, as they ignore the area for Hyderabad for 1891-92, which has been entered in the body of the statement. This error also necessitates a qualification of his remarks on the comparison. The area of cultivation for the province, as shown in paragraph 3 above, is 2,399,055 acres; and adding 228,504 acres of 'Dubári' and 1,827 of unauthorized cultivation in Shikárpur, the area of cultivation reaches the satisfactory total of 2,629,386 acres.

15. The gross revenue, as compared with the previous year, was as follows:—

	1892-93.	1891-92.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
<i>Government Land.</i>				
Consolidated assessments ...	57,04,102	51,88,713	5,15,389	.....
<i>Deduct—</i>				
Remissions ...	2,50,770	1,43,964	1,06,806	.....
<i>Net consolidated assessments</i> ...	54,53,332	50,44,749	4,08,583	.....
<i>Deduct—</i>				
Land share ...	5,45,332	5,04,470	40,862	.....
Irrigation share of net consolidated assessments...	49,08,000	45,40,279	3,67,721	.....

	1892-93.	1891-92.	Increase.	Decrease.
<i>Jágíir Land.</i>	Rs.	Rs.	Rs.	Rs.
Assessment on Khelát lands ...	63,517	50,725	12,792	.....
Do. on British Jágíir lands ...	66,134	66,813	.....	679
	1,29,651	1,17,538	12,113	.....
<i>Deduct—</i>				
Remissions ...	20,360	10,935	10,325	.....
	1,09,291	1,07,503	1,788	.....
Total net assessed revenue ...	50,17,291	46,47,782	3,69,509	.....
Miscellaneous receipts—Actuals...	64,886	63,909	977	.....
Total canal revenue ...	50,82,177	47,11,691	3,70,486	.....

The figures of assessments on Government lands shown in the above table do not agree with those shown in the corresponding statement in last year's review, as they include assessment on unauthorized cultivation. The comparison shows an increase under all heads except assessments on British jágíir, which show a slight falling off. The distribution of the canal revenue under Major and Minor Works is shown in paragraph 6 above. The most noticeable increase is under Major Works (Rs. 2,01,669) and Works for which only Revenue Accounts are kept (Rs. 157,458). Under the latter, as also under Minor Works for which Capital Accounts are kept, the assessments are the largest yet recorded.

The Commissioner observes that of the increase in the net consolidated assessment Rs. 90,000 are due to the revision of the rates in Rohri, Dádu, Shahdád-pur (Hyderabad) and Mirpur Khás talukas. The Superintending Engineer has, in paragraph 14 of his report, given, for the first time, very useful information regarding irrigational settlements and the rates assessed under them.

16. During the year under report the total remissions on Government lands reached the large figure of Rs. 2,50,770, or Rs. 1,06,806 more than the amount for the previous year. In 1891-92 the remissions in the Begári Canals District alone amounted to Rs. 1,06,401, but owing to the better working of the Desert Canal the remissions have fallen in that district to Rs. 21,458. The Western Nára and Karáchi districts account for four-fifths of the total remissions. In the former the remissions amounted to Rs. 86,742 and in the latter to Rs. 1,09,959. In both cases they were necessitated by the damage done by river and hill floods. In the Western Nára District the loss was more than recouped by rabi cultivation.

17. The Superintending Engineer states that the net consolidated assessment on unauthorized cultivation has this year been included in Canal Returns VIII and VIII-A for all revenue districts except Shikárpur, and, therefore, cannot be shown separately. For the Shikárpur District the amount was Rs. 5,056, of which the irrigation share would be Rs. 4,550. If this is added to the irrigation share of net consolidated assessment shown in paragraph 15 above, the total would come to Rs. 49,12,550. The Commissioner observes that, owing to the peculiar nature of the season under report, the effect of the orders issued in the matter of disposing of applications for land with greater promptitude, and thus reducing the amount of fines levied on persons cultivating without permission, is not very marked. It is hoped that future years will give better results.

18. Mr. Thompson, in paragraph 11 of his report, raises the question of including the village cess in the consolidated assessments of the year on which the irrigation share is calculated. He contends that the village cess fund is formed by a deduction of

th of the assessment on cultivation, and the balance only is shown as assessment from irrigation, and that the net consolidated assessment shown in the report is ¹⁶/₁₇ths of the actual assessment. Mr. James meets this contention by saying that the village cess is a special levy under an Act of the Legislature for a special object, and has been included in, and is collected with, the assessment only for administrative convenience. The question is one for consideration in the Revenue Department, and should accordingly be referred to that Department for orders. The Commissioner and Superintending Engineer, however, agree in taking exception to the procedure by which this Department is burdened with a portion of the cost of the village establishments employed in the collection of revenue, and which are no longer paid by Government. The subject of reconsidering the percentage of revenue collection charges has already been referred to the Revenue Department for consideration in the first instance.

Comparison between assessments and realizations.

19. The comparison between assessments and realizations stands as follows :—

	Government Lands.	Khelât Lands.	British Jâghir.	Total.
	Rs.	Rs.	Rs.	Rs.
Unrealized balance at the end of 1891-92 ...	*58,198	43,683	*10,893	1,12,774
<i>Deduct —</i>				
Remissions on account of former years ...	11,168	20,360	.....	31,528
	47,030	23,323	10,893	81,246
Assessment during year ...	54,53,332	63,517	66,134	55,82,983
Total for collection ...	55,00,362	86,840	77,027	56,64,229
Actual receipts ...	54,38,765	54,069	61,381	55,54,215
Balance outstanding ...	61,597	32,771	15,646	1,10,014

* Differs from figures given in last year's report on account of inclusion of certain sums for unauthorized cultivation and adjustment in the Revenue Department.

The total for collection on Government lands shows a satisfactory improvement, the increase being Rs. 4,41,394 or Rs. 3,99,294, including the figures for unauthorized cultivation. All districts except Karachi show an increase, the figures for Upper Sind Frontier and Shikarpur districts being Rs. 1,49,707 and Rs. 2,30,401 respectively.

The outstanding balance is Rs. 61,597, or Rs. 3,338 in excess of last year's. The Commissioner, however, remarks that Rs. 9,535 had been collected after the close of the year, reducing the outstandings to Rs. 52,062, which is a satisfactory result considering the large increase in the canal revenue. The balances in the Upper Sind Frontier District show an appreciable reduction. In this and Karachi districts, postponements had to be granted in cases in which the kharif crops had been destroyed, as the rabi return was not good, and the cultivators were suffering from a succession of floods and other calamities.

In a foot-note to Statement C in paragraph 17 of the report, the Superintending Engineer alludes to an error in the statistical statements prepared by the Examiner of Public Works Accounts in respect of figures of actual receipts for the year 1891-92. It appears, from the correspondence already before Government, that, to avoid delay in the issue of the several annual returns and the Administrative Accounts, the Examiner made use of figures in the canal returns of the Upper Sind Frontier and Shikarpur districts before their correctness was certified to by the Accountant General, and the result was that the area and revenue of lands under the Begári Canal in the Shikarpur District,

which were already recorded in the returns for the Upper Sind Frontier District, were included over again. The excess, therefore, has been as follows:—

				Acres.
Area	...	...	...	22,311
				Rs.
Assessment	...	...	...	51,244
Realization	...	...	...	51,213

Mr. Thompson as soon as he noticed these excesses invited the attention of the Examiner to the matter with a view to corrections being made in the statements for the Revenue Report prepared in the Examiner's office. The Examiner, however, replied that the necessary corrections could not be effected, as it was desirable that there should be no disagreement between the figures shown in the Revenue Report and those given elsewhere. It is now proposed to rectify the error by carrying out the necessary adjustments in the Administrative Accounts for 1893-94. The correspondence has been submitted to the Government of India. A copy has also been sent to the Revenue Department with a request that orders may be issued for securing a more prompt submission of Canal Returns VIII and VIII-A.

Under Khelát lands the total for collection has risen from Rs. 64,424 to Rs. 86,840, and actual receipts from Rs. 20,741 to Rs. 54,069. Mr. James remarks that this is satisfactory only so far as it goes. He adds that the revenue has fallen off steadily, and while complaints from Khelát land-owners never cease, the Irrigation Department complains of the undue draw off, by Khelát Zamindárs, of water at the tail of the Desert Canal as positively injuring that work. A separate canal outside Sind for Khelát lands is a great desideratum, and the matter is engaging the attention of the Agent to the Governor-General, Beluchistán. The outstandings show a decrease of Rs. 10,912.

Under British Jāghir, the total for collection has fallen off from Rs. 82,293 to Rs. 77,027, and receipts from Rs. 71,396 to Rs. 61,381, while the outstanding balances have risen from Rs. 10,897 to Rs. 15,646. The amount of assessment, however, shows a decrease of Rs. 679 only. Mr. James notes that while the kharif area decreased by 1,603 acres, the revenue increased by Rs. 494; on the other hand, while the rabi area increased by 3,993 acres, the revenue diminished by Rs. 1,173. This result is attributed to a smaller area of kharif bearing a higher rate and a larger area of rabi bearing a lower rate having been cultivated during the time for which the returns are prepared.

20. The irrigation share of actual collections in Government lands amounted to Rs. 48,94,826, and the total canal revenue, on the basis of actual realizations, was thus Rs. 50,75,162, detailed as below:—

				Rs.
Government lands	...	...	...	48,94,826
Khelát	...	...	...	54,069
British Jāghir	...	...	...	61,381
Miscellaneous	...	...	...	64,886
Total				50,75,162

against Rs. 46,95,089 realized in 1891-92 inclusive of collections on account of unauthorized cultivation.

The total in column 7 against 1891-92 in Statement C—3 in the body of the report is incorrect. The figures in column 2 include collections on account of unauthorized cultivation, and, therefore, the total in column 7 should have been Rs. 47,15,711.

21. During the year under report, the occupancy rights of *28,932 acres were sold, realizing Rs. 62,813, of which the irrigation share was Rs. 56,532. The

*Statement No. VII and sum to be credited as indirect revenue, calculated at para. 20 of report give 23,929 acres. 4 per cent. on the irrigation share was thus Rs. 2,262.

The credit to end of 1891-92 was Rs. 20,622, and the cumulative credit to end of 1892-93 is, therefore, Rs. 22,884.

22. With this addition the actual credits to the canals for 1892-93 amounted to Rs. 50,98,046. Deducting Rs. 38,634 on account of refunds the balance is Rs. 50,59,412. This amount is accounted for as follows:—

Exhibited in the Examiner's General Abstract of financial results.

Works for which Capital and Revenue Accounts are kept—

				Rs.	Rs.
Major Works	...	...	...	10,24,814	
Minor Works	...	...	...	11,77,441	
					22,02,255
Works for which only Revenue Accounts are kept	...				22,77,273
Agricultural Works	...	...	...		6,546
			Total shown in the Accounts	...	44,86,074
<i>Add—</i>					
Average revenue before improvements	...				6,24,551
			Total	...	51,10,625
<i>Deduct—</i>					
Amount taken twice credit for	...	...	...		51,213
			Actual receipts	...	50,59,412

23. Paragraph 22 of the report contains a statement showing the loss to canals represented by the difference in rates on Government and other land. The Examiner also has submitted a memorandum showing the loss during and to end of 1892-93. In reviewing the report for 1891-92 it was pointed out that it was no longer necessary to show this loss in the Revenue Report. Mr. Thompson, however, subsequently represented that pending a final settlement of the question of raising the rates of hakabo it would seem advisable to continue to show in the Revenue Report the loss in this respect, and Government have approved of his proposal.

It was also pointed out, last year, that the proportionate share of the cost of clearances and improvement assignable to supplying water to jágir lands had not been shown separately. The Superintending Engineer in his present report dwells on the difficulty of determining this proportion, but suggests that a fair and simple approximation can be arrived at by taking the cost of maintenance per acre in the canal system by which the jágirs are watered and multiplying it by the cultivation in the jágir. The Commissioner in Sind has not touched upon this subject.

24. It appears from paragraph 13 of the Commissioner's memorandum that the jágir survey is now completed and that the Collectors have been requested to utilize the survey registers in recording jágir cultivation and assessing hakabo according to areas recorded in the registers with effect from 1893-94. The results of these measures will be awaited with interest.

25. The entire expenditure of the year is shown in the Examiner's general abstract of financial results to have been—

<i>Capital.</i>				Rs.
Major Works	...	...	...	2,08,443
Minor Works	...	...	...	87,603
				2,96,046
<i>Revenue.</i>				
Major Works	...	...	...	3,45,226
Minor Works for which Capital and Revenue Accounts are kept	...	...	...	3,91,691
				7,36,917
Works for which only Revenue Accounts are kept	...			9,52,128
Agricultural Works	...	...	...	3,57,054
			• Grand Total	23,42,145

Details of expenditure.

25. The following abstract gives the details of the expenditure of the year on each class of canals :—

	DIRECT CHARGES.					INDIRECT CHARGES.			Revenue Collection.	Grand Total.
	Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Leave and pension allowances.	Capitalization.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Capital Expenditure.										
Major Works ...	1,61,159	...	40,390	1,353	2,02,802	5,641	...	5,641	...	2,08,443
Minor Works ...	67,392	...	13,479	674	81,545	1,387	4,171	6,008	...	87,903
Total Capital Outlay	2,28,551	...	53,869	2,027	2,84,347	7,028	4,171	11,899	...	2,96,016
Revenue Expenditure.										
Major Works ...	36,392	1,60,118	39,192	805	2,45,497	6,036	...	6,036	1,02,796	3,54,329
Minor Works—Works for which Capital and Revenue Accounts are kept	21,813	2,80,322	61,900	677	4,00,762	11,916	...	11,916	1,76,255	5,87,933
Works for which only Revenue Accounts are kept	1,40,416	4,32,958	1,52,971	829	7,27,174	...	...	...	2,24,054	9,52,128
Agricultural Works for which neither Capital nor Revenue Accounts are kept	23,717	81,528	35,121	10,665	1,54,131	...	...	...	556	1,54,997
Total Minor Works	1,85,946	8,11,308	2,73,042	12,171	12,82,367	11,916	...	11,916	4,00,765	16,85,048
Total Revenue Expenditure	2,22,338	9,90,328	3,11,234	12,976	15,27,864	17,932	...	17,932	5,03,561	20,43,377
Grand Total Outlay, 1892-93	4,50,879	9,90,328	3,66,008	15,003	18,12,211	25,489	4,171	20,651	5,03,561	23,45,423
Grand Total Outlay, 1891-92	3,72,625	9,88,180	3,36,186	11,794	17,08,755	23,590	1,400	24,990	4,21,565	21,53,335

In his Table IV the Superintending Engineer has given the figures under the several heads after making deductions on account of old maintenance charges, and, similarly, in statements in paragraphs 23 and 29 he has shown the necessary deductions. This is not correct. In paragraph 3 of Government Resolution No. 44 A.I.—359, dated 28th February 1893, it was distinctly stated that the set of figures arrived at, after making deductions on account of old works, should only be used in determining the financial results of Capital expenditure, but that for all other purposes the deduction should not be taken into account. The drift of these orders appears to have been misunderstood by the Superintending Engineer. In future, these deductions should not be taken account of by the Superintending Engineer in his report and statements, except for the purpose of determining the financial results of Capital expenditure.

The total expenditure shown in the above statement (Rs. 23,45,423) will correspond with that shown in the preceding paragraph, when Rs. 3,278 are added to the latter on account of old Indirect Charges. In the Examiner's accounts, Rs. 2,05,345 have been deducted from the figures of Revenue expenditure for the Major and Minor Capital Works, but the addition made under Agricultural Works is only Rs. 2,02,067, Indirect Charges not finding a place under the latter head.

Irrespective of the deductions on account of old maintenance charges, the figures for Extensions and Improvements and Repairs given in Table IV for Minor Works for which Capital and Revenue Accounts are kept, do not correspond with those given in Statement I-C prepared by the Examiner, there being an excess of Rs. 111 under Extensions and Improvements and a corresponding decrease under Repairs.

26. The Capital expenditure under Major Works exceeded that of the previous year by Rs. 90,460, and was, as in the previous year, incurred mainly on Eastern Nára works. Rs. 15,816 were spent on the Unharwah extension, which was commenced during the year. Under Minor Works the expenditure was solely on the Fuleli Canals.

27. The outlay on Extensions and Improvements was Rs. 2,22,328 against Rs. 2,65,824 in 1891-92. The expenditure of Rs. 36,382 under Major Works was incurred in the Begári and Eastern Nára districts. Rs. 15,040 were spent on excavating a new mouth and Rs. 12,513 on an escape sluice and channel for the Desert Canal. The outlay in the Eastern Nára was due to adjustments on account of old expenditure on the regulator and bridges on the Mithrau Canal.

Under Minor Works for which Capital and Revenue Accounts are kept, the expenditure is made up of several items on the Ghár, Marak and Fuleli canals. The bulk of the expenditure under Works for which only Revenue Accounts are kept was in the Western Nára District, where work in connection with the Pritchard Canal, new Feeder Western Nára and the Dhamráo Canal was done. It is satisfactory to notice that the Pritchard Canal, in spite of the erosion at its mouth, was of great use when the river was low early in the season. The new feeder was also of assistance. Mr. James is of opinion that the Dhamrao Canal is likely to pay excellently. In the Karáchi Canals the Bághiar embankments were partially restored, and some bunds were extended in order to prevent breaches and protect cultivation. The Commissioner considers that the policy in regard to the Bághiar may require reconsideration, and that it is a question whether a regulator at its mouth should not be undertaken. The matter should be reported upon fully by the Superintending Engineer, Indus Right Bank. Of the expenditure under Agricultural Works, Rs. 15,022 were for improving and extending the Nára bund.

The Superintending Engineers have now been allowed discretionary grants, and Mr. James' suggestion as to increasing the amount of the grants has already been anticipated to a small extent by providing in the Budget for 1894-95 for a discretionary grant of Rs. 30,000 against Rs. 28,000 in 1893-94.

23. The expenditure on repairs, as compared with the previous two years and with the normal estimate of requirements, was as follows:—

	Major Works.	MINOR WORKS.		Total.
		Canals.	Bunds.	
	Rs.	Rs.	Rs.	Rs.
Outlay in 1892-93...	1,69,118	6,51,254	1,59,954	9,80,326
„ „ 1891-92...	1,31,919	7,04,870	1,51,391	9,88,180
„ „ 1890-91...	1,29,954	7,26,755	1,20,606	9,77,315
Normal Estimate ...	1,31,000	6,46,000	1,23,000	9,00,000

From this it will be seen that the outlay for 1892-93 was less than that of the previous year by Rs. 7,854, but still it exceeded the expenditure in all the preceding years except 1887-88. The total expenditure on canals fell short of that of the previous year by Rs. 16,417, but a division under Major and Minor Works shows that under the former the outlay exceeded that of the previous year by Rs. 37,199, owing to the special clearance in the Desert Canal and in the Eastern Nára, the canals under Minor Works showing a decrease of Rs. 53,616. The bunds show an increase of Rs. 8,563.

The expenditure on canals, though above the average, shows a steady decrease since 1889-90, while that on river embankments has uniformly increased. Mr. Thompson remarks that this is chiefly due to the rise of level of water in the river in the Karáchi Canals and Western Nára districts, which makes less work necessary for canals, but more for embankments. As canals have to be protected by bunds of sufficient strength, expenditure on them is indispensable. The decrease of expenditure on canals, however, has not had any effect on their working, the area watered by them showing a steady increase.

Until recently the procedure followed regarding the classification of expenditure on retired loop bunds was not uniform. Works of this kind were sometimes classed as 'repairs' and sometimes as 'extensions and improvements' apparently as funds were available under either of those heads. This was not correct, and the matter has been set right by the issue of orders contained in Government Resolution No. 171 A. I.—1231, dated 8th August 1893. It has also been decided to make a separate provision in the Budget for special repairs in order to meet the recommendation of the Sind Irrigation Committee in paragraph 99 of their report.

29. The total expenditure on repairs includes Rs. 1,72,072 on account of Works Establishments. establishment charged to Works against Rs. 1,87,201 in the previous year. The decrease of Rs. 15,129 is satisfactory.

30. The outlay on establishment is commented on in paragraph 27 of the Superintendent Engineer's report. As pointed in the Establishment charges. previous years, the figures given here do not correspond with those in Table IV and the statement in paragraph 25 above. In reviewing the report for 1890-91, Government directed that such discrepancies should either be avoided or explained, and the attention of the Superintendent Engineer should again be drawn to the matter.

The increase under this head is Rs. 28,625 according to the Superintendent Engineer's figures, and Rs. 29,817 according to the statement in paragraph 25 above. The causes are explained by the Superintendent Engineer.

31. The following table recapitulates the financial results of the year :—

	Gross Revenue.	Working Expenses.	Percentage.	Net Revenue.	Percentage of total net revenue.
	Rs.	Rs.	Rs.	Rs.	Rs.
Major Works ...	*10,10,658	3,54,329	35	6,56,329	21
<i>Minor Works.</i>					
Works for which Capital and Revenue Accounts are kept ...	17,64,935	5,87,933	33	11,77,002	37
Works for which only Revenue Accounts are kept ...	22,77,273	9,52,128	42	13,25,145	42
Total ...	50,52,866	18,94,390	37	31,58,476	100
Agricultural Works ...	6,546	1,54,987	...	-1,48,441	...
Total, 1892-93 ...	50,59,412	20,49,377	40	30,10,035	...
Total, 1891-92 ...	46,77,875	20,22,573	43	26,55,302	...
Difference ...	+ 3,81,537	+ 26,804	...	3,54,733	...

* Exclusive of Rs. 51,213 twice taken credit for in the Examiner's accounts.

Compared with last year the gross revenue shows an increase under all heads except 'Agricultural Works,' the decrease under which is insignificant. The working expenses show an increase of Rs. 26,804, but, owing to the large increase in revenue, the percentage has fallen off from 43 to 40, which is satisfactory. The increase of net revenue is Rs. 3,54,733, which bears ample testimony to the excellent results of the operations of the year under report.

32. The financial results of Capital Account works were as follows :—

	During year.	To end of year.
	Rs.	Rs.
Major Works.		
Capital outlay ...	2,08,443	88,88,696
Gross Revenue (realizations) ...	*10,10,658	.....
Deduct—Share due to old Irrigation Works ...	37,054	.....
Gross Revenue due to Capital outlay ...	9,73,601	1,49,12,742
Revenue charges, excluding old maintenance charges.	3,45,226	63,45,553
Net Revenue ...	6,28,375	85,67,116
Simple Interest ...	3,39,822	64,00,801
Net profit after paying interest ...	2,88,553	21,66,315

* Exclusive of Rs. 51,213 on account of double credit.

	During year.	To end of year.
	Rs.	Rs.
<i>Minor Works.</i>		
Capital outlay	87,603	34,82,390
Gross Revenue (realizations)	17,64,935	.....
Deduct—Share due to old Irrigation Works	5,87,494	.....
Gross Revenue due to Capital outlay	11,77,441	2,49,54,354
Revenue charges excluding old maintenance charges	8,91,691	1,12,96,169
Net Revenue	7,85,750	1,36,58,185
<i>Total Major and Minor Works.</i>		
Capital outlay	2,96,046	1,23,71,086
Net Revenue after deducting working expenses	14,14,125	2,22,25,301

33. Taken all together, the net revenue realized amounted to Rs. 14,14,125, or 11.71 per cent. on the Capital outlay to end of the previous year (Rs. 1,20,75,040), against 10.05 in 1891-92 and 11.87 in 1890-91. The profit from the Major Works after paying interest was Rs. 2,88,553 against Rs. 59,288 in the previous year and Rs. 2,86,098 in 1890-91. The results of the year 1891-92 were exceptionally unfavourable owing to the failure of the Desert Canal, and it is satisfactory to note that the returns of the year under report not only show an improvement over that year, but exceed those of 1890-91.

34. The net revenue from Minor Works was Rs. 7,35,750, and thus falls short of that of the previous year by Rs. 21,568.

35. The Superintending Engineer was not able to complete Statement I-A. in time for submission with his report for 1891-92. This has been embodied in the report under review for the first time. It is not, however, quite complete.

36. From Table I-E. it appears that the duty of water for kharif varied from 29.29 acres on the Ghár Canal to 49.39 on the Thar Canal. The following gives a comparison with the previous year for some of the principal canals:—

				Kharif area irrigated per cubic foot per second.	
				1891-92.	1892-93.
Desert Canal	...	...	...	49.41	42.01
Begári	...	...	...	54.36	49.36
Sukkur	...	...	...	32.41	31.23
Ghár	...	...	...	35.85	29.29
Mithrau	...	...	...	31.53	42.52
Thar	...	...	...	25.93	49.39
Fuleli	...	...	...	44.66	38.10

The average discharges from which this information is deduced were:—

				1891-92.	1892-93.
Desert Canal	...	...	...	1,217	1,984
Begári	...	...	...	3,214	3,902
Sukkur	...	...	...	1,682	1,864
Ghár	...	...	...	6,677	6,477
Mithrau	...	...	...	2,800	2,352
Thar	...	...	...	1,139	916
Fuleli	...	...	...	7,276	7,401

37. Statement II-E. shows the incidence of working expenses on gross sessed revenue. The totals for Major and Minor Works together, and consequently the percentages given in the statement submitted by the Superintendent were incorrect, and have been corrected. The figures of area also in the statement do not correspond with those either in Table III or in

Statement II-A. The Commissioner, in paragraph 28 of his memorandum, embodied a statement giving the results. There is an error in this statement also, the gross revenue for Eastern Nára should be Rs. 1,39,104 and the total for Major Works Rs. 10,24,978 and the grand total Rs. 22,03,157. The statement was prepared by the Examiner of Public Works.

pare favourably with those of the previous year. The percentage in the case of Major Works is 33.63 against 44.38 in the previous year, and in the case of Minor Works 33.24 against 40.74. It may also be pointed out here that the figures of gross revenue and working expenses to be used in this statement should not exclude the revenue and charges on account of old irrigation.

38. The information in Statement III-E. has been given by canals, as suggested by the Commissioner in the previous year's report. Mr. James suggests further improvement by giving the value per acre. The figures for Khelat have been entered in the Commissioner's office.

39. As observed last year, the recommendations of the Sind Irrigation Committee of 1892 are being gradually given effect to, and the favourable results of the year under report emphasize the desirability of careful investments on works of irrigation in Sind. Works in the Eastern Nara District are being pushed on vigorously, and will, it is hoped, very shortly be supplemented by the commencement of the Jámrao Canal, which the Government of India have recommended to the Secretary of State for sanction. The project for the Shikárpur Canal is under consideration, and those for improvement of the Nasrat, Naolakhi and Dad canals have been received. The division of Sind into two circles, each under the charge of a Superintending Engineer, which has now been accomplished, will enable a closer supervision to be given to existing works, whilst new projects will be more rapidly examined. Proposals for the formation of a separate executive district for the river Indus will be submitted to the Government of India shortly.

40. Government note with pleasure the high encomium bestowed by the Commissioner in Sind on the excellent administration of his charge by Mr. Thompson. The praise awarded to the other officers named by the Superintending Engineer, and noted in margin*, is also well deserved.

* Mr. D. W. Herbert. Mr. T. W. DeWinton.
 " P. P. Chandanani. " J. Yeag.
 " H. J. Landon. " T. Summers.
 " R. R. Menneer. " J. Tate.

41. The question of the compilation of the report, in future, will be dealt with separately. Every year the report shows improvement in its several parts, but it appears to Government that it would be more satisfactory, in future, to print it in the Commissioner's press, so that the Superintending Engineer may have an opportunity of seeing it in proof, and correcting errors that inadvertently creep in. The Commissioner in Sind also would find it more convenient to review it in print. It is suggested that the use of marginal headings adopted in this review might be followed in the Superintending Engineer's Report. The maps and charts should, as usual, be sent to the Photozincographic Office at Poona to be printed. The report with the maps and charts and the Resolution reviewing it might be bound in the Government Central Press, and copies distributed from the Secretariat.

42. Copies of the report and of this review should, as usual, be forwarded to the Government of India and the Secretary of State.

G. O. W. DUNN,

Acting Under Secretary to Government.

To

The Revenue Department, Secretariat,
 The Political Department, Secretariat,
 The Commissioner in Sind,
 The Survey Commissioner and Director of Land Records
 and Agriculture,
 The Superintendent, Sind Revenue Survey,
 The Chief Engineer, C. D.,
 The Superintending Engineer, N. D.,
 The Superintending Engineer, S.D.,
 The Superintending Engineer, Indus Left Bank Division,
 The Superintending Engineer, Indus Right Bank ,,
 The Examiner of Public Works Accounts,
 The Editor's Table,

The Government of India,
 The Secretary of State for India. } By letter.



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